APPENDIX C FACILITY GUIDELINE INDEX (FACILITY "LOOK-UP" TABLE)

APPENDIX C - I

RESPONSIBILITIES OF ALL FACILITIES

FACILITY GUIDELINE INDEX

APPENDIX C-I RESPONSIBILITIES OF ALL FACILITIES

NOTHING IN THIS APPENDIX SHALL BE CONSTRUED AS REQUIRING THAT SOURCE TESTING BE CONDUCTED FOR SUBSTANCES SET FORTH IN THE CASES WHERE A SUBSTANCE SET FORTH HEREIN IS NOT PRESENT AT A PARTICULAR FACILITY, THE FACILITY OPERATOR SHALL NOT ATTEMP TO QUANTIFY THE EMISSIONS OF SUCH SUBSTANCE, BUT SHALL PROVIDE ADEQUATE DOCUMENTATION TO DEMONSTRATE TO THE DISTRICT THAT THE POSSIBLE PRESENCE OF THE SUBSTANCE AT THE FACILITY HAS BEEN ADDRESSED AND THAT THERE ARE NO EMISSIONS OF THE SUBSTANCE FOR SPECIFIED REASONS.

Notes For Appendix C-I

(1) The following substance abbreviations are used throughout the index:

BaP = Benzo[a]Pyrene

CFC-113 = Chlorinated fluorocarbon EDB = Ethylene dibromide EDC = Ethylene dichloride

ETO = Ethylene oxide

Perc = Perchloroethylene, Tetrachloroethylene

PCBs = Polychlorinated biphenyls

PAHs = Polycyclic aromatic hydrocarbons

POM = Polycyclic organic matter (other than PAHs)
TCA = 1,1,1-Trichloroethane, Methyl chloroform

TCE = Trichloroethylene

(2) PAHs are composed of the following substances:

Acenaphthene Dibenzo[a,e]pyrene Acenaphthylene Dibenzo[a,h]pyrene Anthracene Dibenzo[a,i]pyrene Benz[a]anthracene Dibenzo[a,l]pyrene Benzo[b]fluoranthene Fluoranthene

Benzo[j]fluoranthene Fluorene

Benzo[k]fluoranthene Indeno[1,2,3,-cd]pyrene
Benzo[a]pyrene Naphthalene
Benzo[g,h,i]perylene Phenanthrene

Chrysene Pyrene
Dibenzo[a,h]anthracene

- (3) Substances emitted by a particular device or process may not be limited to those listed in this Facility Guideline Index .

 ALL FACILITIES ARE RESPONSIBLE FOR IDENTIFYING AND ACCOUNTING FOR ANY LISTED SUBSTANCE USED, MANUFACTURED, FORMULATED, O R RELEASED; THIS APPENDIX IS NOT AN EXHAUSTIVE LIST.
- (4) Nitrosamines refer to the following listed substances:

Dialkylnitrosamines 4-(N-nitrosomethylamino)-1-(3-pyridyl)-1-butanone (NNK) N-Methyl N'-nitro-N-nitrosoguanidine p-Nitrosodiphenylamine N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine N-Nitrosodi-n-propylamine N-Nitroso-N-ethylurea N-Nitrosomethylethylamine N-Nitroso-N-methylurethane N-Nitrosomethylvinylamine N-Nitroso-N-methylurea N-Nitrosonornicotine N-Nitrosopiperidine N-Nitrosopyrrolidine

N-Nitrososarcosine

(5) This Facility Guideline Index is arranged in alphabetical order. The first part of the index, Appendix C-I, lists device s common to many industries and the second part of the index, Appendix C-II, lists industry types. Extensive cross-referencing has been incorporated into the index, particularly in Appendix C-II, to identify industries and processes known by alternative names. It may be necessary to consult alternate names to locate a given industry type. Furthermore, more than one industry type may apply to a given facility.

APPENDIX C-I RESPONSIBILITIES OF ALL FACILITIES

ALL FACILITIES ARE RESPONSIBLE FOR IDENTIFYING AND ACCOUNTING FOR ANY LISTED SUBSTANCE USED, MANUFACTURED, FORMULATED, O R RELEASED; THIS APPENDIX IS NOT AN EXHAUSTIVE LIST.

All Facilities shall account for the following devices and emitting processes and associated emissions, and shall account for ANY OTHER PROCESS EQUIPMENT THAT MAY BE A SOURCE OF RELEASE OF ANY LISTED SUBSTANCE:

Device/Process Types of Emissions (see note 3)

FUEL/WASTE COMBUSTION

Boilers, Heaters, Kilns
IC Engines, Furnaces
Coal-fired

Particulate metals

including but not limited to:

Other particulate-phase substances including but not limited to:

Gaseous products

including but not limited to:

Oil-fired Gaseous and particulate

Residual substances including but not

Distillate limited to:

Waste Arsenic, Benzene, BaP & other PAHs*,

Natural gas-fired Gaseous and particulate

substances including but not

limited to:

* See Note 2 (Notes appear at the beginning of this index.)

Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Manganese, Mercury, Nickel, Radionuclides, Selenium, Zinc And any other listed metals

BaP & other PAHs*, Dibenzofurans, Dioxins, Phosphorus, POM

Acetaldehyde, Benzene, Dichlorobenzenes, EDC, EDB, Formaldehyde, Hydrogen chloride, Hydrogen fluoride, Phenols

Arsenic, BaP & other PAHs*, Benzene, Beryllium, Cadmium, Chromium, Copper, Dioxins, Formaldehyde, Lead, Manganese, Mercury, Nickel, POM, Radionuclides, Selenium, Zinc, Any other listed metals

Beryllium, Cadmium, Chloroform, Chromium, Copper, Dibenzofurans, Dioxins, EDB, EDC, Manganese, Mercury, Methylene chloride, Nickel, Perc, PCBs, POM, Toluene, TCA, TCE, Xylenes, Any other listed metals

Acetaldehyde, Acrolein, Benzene, Formaldehyde, POM, BaP & other PAHs*, Propylene, Toluene, Xylenes, Any other listed metal (due to contamination or other means)

Specific Substances Device/Process Types of Emissions (see Note 3) -----FUEL/WASTE COMBUSTION continued Process gas-fired Gaseous and particulate substances including but not limited to: Benzene, Formaldehyde, Phenol, Any other listed metal Solid Waste-fired Gaseous and particulate substances including but not limited to: Formaldehyde, Manganese, Nickel, Phenol Wood-fired Gaseous and particulate substances including but not limited to: Acetaldehyde, Arsenic, Benzene, BaP & other PAHs*, Chromium, Copper, Dioxins, PCBs, POM, And any pesticides used on wood Other Liquid-fired From boiler corrosion inhibitor Nitrosomorpholine, Any other listed metals Coke Ovens Benzene, BaP & other PAHs*, Benzyl chloride, Coke oven emissions, Cresols, Dibenzofurans, Dioxins, Nitrosamines, POM Particulate metals Flares including but not limited to: Arsenic, Beryllium, Chromium, Lead, Mercury, Nickel Any other listed metal Other particulate-phase substances including but not limited to: BaP, Dibenzofurans, Dioxins Gaseous products including but not limited to: Aldehydes, Benzene, Dichlorobenzenes, EDB, EDC Landfill Gas Also see Boilers, Heaters, IC Engines, etc, Appendix C-I Incinerators - see ALL other combustion releases, but pay particular attention to the following: Particulate metals including but not limited to: Arsenic, BaP & other PAHs*, Beryllium,

Mercury, Nickel, POM, Selenium, Zinc,
Any other listed metal
Other particulate-phase substances
including but not limited to:
Bap & other PAHs*, Dibenzofurans,

Gaseous products including but not limited to:

Benzene, Dichlorobenzenes, EDB, EDC, Hydrogen chloride, Hydrogen fluoride, Vinyl chloride

Dioxins, PCBs, POM

Cadmium, Chromium, Copper, Manganese,

Device/Process

Types of Emissions

Incinerators continued

Cotton Gin Waste Hazardous Waste Hospital Waste Municipal Refuse

Pathological Scrap Wood Sludge

Solid/Biomass Waste Waste-To-Energy

SOLVENT USE

Miscellaneous Use

Degreasing Operations

Gaseous and aerosol organic compounds including but not limited to:

Cleaning & Drying Metal D'grs Oil, Wax, Fat Extracting

Photoresist Stripping Vapor Degreasing

Fabric Finishing (Woven)

Floor Wax

Paint & Varnish Removal

Polish (Shoe, Furniture)

Specific Substances (see Note 3)

Arsenic
Dioxins, Any other listed metals
Dioxins, Radionuclides, Any listed metals
BaP & other PAHs*, Beryllium, Cadmium,
Chromium, Manganese, Mercury, Nickel, POM
Dioxins
BaP & other PAHs*, POM
Acrolein, Arsenic, Asbestos, Beryllium,
Cadmium, Chromium, Dioxins, Manganese,
Mercury, Nickel, POM, PAHs*, Any other
listed metals
Any listed metals
Acrolein, Dibenzofurans, Dioxins, Manganese,
Nickel, POM, PAHs*, Any other listed metals

Acetaldehyde, Acrolein, Benzene, Carbon tetrachloride, CFC-113, Chlorobenzene, Chloroform, Cresols, Dimethyl sulfate, Dioxane, EDC, Mercury, Methanol, Methylene chloride, Nitrobenzene, Perc, Toluene, TCA, TCE, Xylenes, Any other listed chlorinated solvents

Benzene, Carbon tetrachloride, Chlorinated fluorocarbon, Chlorobenzene, 1,4-Dioxane, Freons, Methylene chloride, Perc, Toluene, TCA, TCE, Any other listed substances Chlorinated fluorocarbons Methylene chloride, 1,4-Dioxane, TCA, TCE

Carbon tetrachloride, Dichloroethane, Methylene Chloride Glycol ethers, Methylene chloride, Xylenes Perc, TCE

1,4-Dichlorobenzene

Carbon tetrachloride

Dioxane, Methylene chloride

Carbon tetrachloride

Device/Process

Types of Emissions -----

SOLVENT USE continued

Rubber Cement

Carbon tetrachloride

Surface Coating

Gaseous and aerosol organic compounds including but not limited to:

From adhesives

From wood finishing From metal finishing

Resin Application Coating Application Flashoff Baking/Curing Ouenching

Storage & Handling - see Liquid Storage & Transfer, Appendix C-I

LIQUID STORAGE & TRANSFER (Fugitive Emissions)

Pipelines

Petroleum Gaseous and aerosol fugitives From: joints, valves

Process Vents

Tanks

Petroleum Products Gaseous and liquid petroleum products Tank Breathing including but not limited to:

Tank Cars and Trucks

Filling Gaseous, liquid and volatile solids Tank Breathing including but not limited to:

Fugitives

From: vents, tanks, condensers Equipment Leaks pumps, valves, compressors

Gaseous and aerosol organic compounds

Specific Substances (see Note 3)

Acetaldehyde, Benzene, Carbon tetrachloride, Chlorobenzenes, Chloroform, Cresols, Dioxane, Methanol, Methylene chloride, Michler's ketone, Nitrobenzenes, 2-Nitropropane, Perc, Phenol, Phthalic anhydride, Styrene, Toluene, TCA, TCE, Xylenes Carbon tetrachloride, Chloroform, Methylene chloride, Toluene, TCE Dioxane, Methylene chloride, Perc, Toluene Perc, Toluene, TCA Formaldehyde

Benzene, Gasoline vapors, Toluene, Xylenes

Transported listed substances

Benzene, EDC, Gasoline vapors, Toluene, Xylenes, Stored listed substances

Each pure organic stored or transferred that is a listed substance Each component of a mixture that is a listed substance

Emissions vary according to substances involved in specific process

Device/Process Types of Emissions

OTHER PROCESSES

Contaminated Soil/Water

Remediation

Chlorinated organics including:

Other organics including

Cooling Towers

Comfort Cooling

Gaseous and aerosol releases possibly containing additives and

including but not limited to: In part due to drift loss

Process Cooling Gaseous and aerosol releases

possibly containing additives and

including but not limited to: In part due to drift loss

Drinking Water Treatment

Industrial Wastewater

Treatment.

Chlorinated organics including:

Other organics including:

On-site Fuel Gaseous and aerosol releases Dispensing

including but not limited to:

Pesticide Use

Printing - see Solvent Use, Appendix C-I Also see Printing & Publishing, Appendix C-II

Sterilizers

Surface Coating Pigments

> Polymer & Resin Precursors Residues/Impurities

Specific Substances (see Note 3)

Carbon tetrachloride, Chloroform, EDC, Methyl chloroform, Perc, TCA, TCE Benzene, Chlorobenzene, Toluene, Xylenes

Chloroform, Chromium, Manganese, Nickel, Any other additives

Chloroform, Chromium, Manganese, Nickel, Any other additives

Chloroform

Carbon tetrachloride, Chloroform, EDC, Methylene chloride, Perc, TCA, TCE Benzene, Chlorobenzene, Toluene, Xylenes

Benzene, Dibromoethane, Dichloroethane, EDB, EDC, Gasoline vapors, Toluene, Xylenes

Arsenic, Carbon tetrachloride, Dibromoethane, 1,4-Dichlorobenzene, Dioxins, EDB, EDC, Lead, Nickel titanate, Zinc oxide

ETO, Formaldehyde, Lead, Toluene, Propylene oxide

Arsenic, Chromium oxide, Lead oxide, Mercury, Zinc oxide Acrylonitrile, 1,3-Butadiene, Ethyl acrylate, Formaldehyde, Phenol, Styrene, Vinyl chloride, Vinylidene chloride, Any other listed substances

Device/Process

Types of Emissions

OTHER PROCESSES, Surface Coating, continued

Additives - Curing agents, Surfactants, Defoamers, Thickeners, Film-control agents Plasticizers

Wastewater Treatment

CONTROL EQUIPMENT

Emission reductions must be quantified:
For each listed substance & device

Specific Substances (see Note 3)

Ammonia

Benzene, Chloroform, EDC, Methylene chloride, TCE, Vinyl chloride, Any other listed substances

APPENDIX C- II

FURTHER RESPONSIBILITIES FOR SPECIFIC FACILITY CLASSES

APPENDIX C-II FURTHER RESPONSIBILITIES FOR SPECIFIC FACILITY CLASSES

NOTHING IN THIS APPENDIX SHALL BE CONSTRUED AS REQUIRING THAT SOURCE TESTING BE CONDUCTED FOR SUBSTANCES SET FORTH IN TH IS APPENDIX. FURTHER, IN CASES WHERE A SUBSTANCE SET FORTH HEREIN IS NOT PRESENT AT A PARTICULAR FACILITY, THE FACILITY OPERATOR SHALL NOT ATTEMPT TO Q UANTIFY THE EMISSIONS OF SUCH SUBSTANCE, BUT SHALL PROVIDE ADEQUATE DOCUMENTATION TO DEMONSTRATE TO THE DISTRICT THAT THE POSSIBLE PRESENCE OF THE SUB STANCE AT THE FACILITY HAS BEEN ADDRESSED AND THAT THERE ARE NO EMISSIONS OF THE SUBSTANCE FOR SPECIFIED REASONS.

Notes For APPENDIX C-II

(1) The following substance abbreviations are used throughout the index:

BaP = Benzo[a]Pyrene CFC-113 = Chlorinated fluorocarbon EDB = Ethylene dibromide EDC = Ethylene dichloride ETO = Ethylene oxide

Perc = Perchloroethylene, Tetrachloroethylene

PCBs = Polychlorinated biphenyls

= Polycyclic aromatic hydrocarbons PAHs

POM = Polycyclic organic matter (other than PAHs) TCA = 1,1,1-Trichloroethane, Methyl chloroform

TCE = Trichloroethylene

PAHs are composed of the following substances:

Acenaphthene Dibenzo[a,e]pyrene Acenaphthylene Dibenzo[a,h]pyrene Anthracene Dibenzo[a,i]pyrene Benz[alanthracene Dibenzo[a,1]pyrene Benzo[b]fluoranthene Fluoranthene Benzo[j]fluoranthene Fluorene Benzo[k]fluoranthene Indeno[1,2,3,-cd]pyrene

Benzo[a]pyrene Naphthalene Benzo[g,h,i]perylene Phenanthrene Pyrene

Chrysene Dibenzo[a,h]anthracene

- (3) Substances emitted by a particular device or process may not be limited to those listed in this Facility Guideline Index .

 ALL FACILITIES ARE RESPONSIBLE FOR IDENTIFYING AND ACCOUNTING FOR ANY LISTED SUBSTANCE USED, MANUFACTURED, FORMULATED, O R RELEASED; THIS APPENDIX IS NOT AN EXHAUSTIVE LIST.
- (4) Nitrosamines refer to the following listed substances:

N-Nitrososarcosine

Dialkylnitrosamines 4-(N-nitrosomethylamino)-1-(3-pyridyl)-1-butanone (NNK) N-Methyl N'-nitro-N-nitrosoguanidine p-Nitrosodiphenylamine N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine N-Nitrosodi-n-propylamine N-Nitroso-N-ethylurea N-Nitrosomethylethylamine N-Nitroso-N-methylurethane N-Nitrosomethylvinylamine N-Nitroso-N-methylurea N-Nitrosonornicotine N-Nitrosopiperidine N-Nitrosopyrrolidine

(5) This Facility Guideline Index is arranged in alphabetical order. The first part of the index, Appendix C-I, lists device and the second part of the index, Appendix C-II, lists industry types. Extensive cross-referencing has been incorporated into the index, particularly in Appendix C-II, to identify industries and processes known by alternative names. It may be necessary to consult altern at names to locate a given industry type. Furthermore, more than one industry type may apply to a given facility.

APPENDIX C-II FURTHER RESPONSIBILITIES FOR SPECIFIC FACILITY CLASSES

ALL FACILITIES ARE RESPONSIBLE FOR IDENTIFYING AND ACCOUNTING FOR ANY LISTED SUBSTANCE USED, MANUFACTURED, FORMULATED, O R RELEASED; THIS APPENDIX IS NOT AN EXHAUSTIVE LIST.

If a facility falls within one or more of the following specific industry types, the facility operator shall account for the following devices and emitting processes, fugitive releases, and their associated emissions, and shall account for ANY OTHER PROCESS EQUIPMENT THAT MAY BE A SOURCE OF RELEASE OF ANY LISTED SUBSTANCE:

Industry/
Emitting Process

Type(s) of Emissions/ Emitting Process Points Specific Substances (see Note 3)

Adhesives Application - see Solvent Use and Other Processes, Appendix C-I

Adhesives Mfg - see Chemical Mfg, Appendix C-II

Aerospace Products Mfg.

Research - see Chemical Mfg and Research & Development, Appendix C-II Surface Coating - see Solvent Use & Other Processes, Appendix C-I

Agricultural Production

Ammonia, Chlorine, EDB, Hydrogen Sulfide, Lead, Silica, All listed metals

Agricultural Chem Mfg - see Chemical Mfg, Appendix C-II Cotton Ginning Ammonia, Arsenic Pesticide Use - see Other Processes, Appendix C-I Waste Burning - see Combustion, Appendix C-I

Aircraft Mfg - see Transportation Equipment Mfg, Appendix C-II

Airports - see Transportation Stations, Appendix C-II

Air Stripping - see Contaminated Soil/Water Remediation, Appendix C-I

Almond Processing

Artificial Flower Mfg

Combustion Processes - see Combustion, Appendix C-I

Apparel Mfg - see Textile Mill, Appendix C-II

Arsenic Mining - see Mining Non-Metals, Appendix C-II

Asbestos Milling/Processing - see Clay, Glass, & Stone Prod, Appendix C-II

Asbestos - see Mining Non-Metals, Appendix C-II

* See Note 2 (Notes appear at the beginning of this index.)

Arsenic

Toluene

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Industry/ Type(s) of Emissions/ Emitting Process Points Some Specific Substances Emitting Process (Including, but not limited to) Asphalt Materials Mfg Asphalt Felts & Coatings - see Petroleum & Coal Products, Appendix C-II Asphaltic Concrete Prod (Including Asphalt Paving Materials Mfg) Processes Including: Batch Plants and Particulate Phases Substances Asbestos, Benzene, Formaldehyde, Organics, Continuous Plants POM, PAHs*, Toluene, TCA, Xylenes, Paving Operations All listed metals Combustion Processes - see Combustion, Appendix C-I Surface Coating - see Solvent Use & Other Processes, Appendix C-I Storage & Handling - see Liquid Storage & Transfer, Appendix C-I Auto Repair, Svc's & Garages - see Transportation Equipment, Appendix C-II Auto Parts Mfg - see Transportation Equipment, Appendix C-II Battery Production - see Metal Smelters, Appendix C-II Beryllium Mining - see Metal Smelters, Appendix C-II Bicycle Mfg/Repair - see Transportation Equipment, Appendix C-II Boat Building/Repair - see Transportation Equipment (Ship & Boat Building), Appendix C-II Box Mfg (folding paperboard type) - see Wood Product Mfg, Paper, Paperboard Containers & Boxes, Appendix C-II Bulk Plants and Terminals Gaseous and aerosol releases including but not limited to: Benzene, Gasoline vapors, Specific Stored Substances listed in Appendix A-I or A-II From fixed roof tanks
From variable vapor space tanks
From floating roof tanks
From floating roof tanks
From flanges, pumps,
and tank trucks Barrel Breathing Barrel Filling Barrel Standing
Barrel Withdraw Valves, Vapor Collect/Control Burial Caskets Mfg Toluene Burning of Solid Waste (Open) - see Combustion, Appendix C-I Bus Mfg/Repair - see Transportation Equipment, Appendix C-II Button Mfg Formaldehyde, Styrene, Toluene, TCE

Cadmium Plating - see Metal Plating, Appendix C-II

Can Mfg - see Metal Product Fabrication, Appendix C-II

Camper & Trailer Mfg - see Transportation Equipment, Appendix C-II

Type(s) of Emissions/ Emitting Process Points Some Specific Substances (Including, but not limited to)

Canned Food Product Mfg.

Can Fabrication - see Metal Product Fabrication, Metal Cans, Appendix C-II Combustion Processes - see Combustion, Appendix C-I Food Processing - see Food Product Mfg, Appendix C-II Paper Labeling - see Wood Product Mfg, Appendix C-II Printing - see Printing & Publishing, Appendix C-II Sterilization - see Other Processes, Appendix C-I Surface Coating - see Solvent Use And Other Processes, Appendix C-I

Car Mfg/Repair - see Transportation Equipment, Appendix C-II

Carbon Black & Charcoal Mfg - see Chemical Mfg, Carbon, Appendix C-II

Cement Mfg - see Clay, Glass, & Stone Prod Mfg, Appendix C-II

Ceramic Plants

Combustion Processes - see Combustion, Appendix C-I

Charcoal Mfg - see Carbon, Appendix C-II

Chemical Mfg

Gaseous and aerosol releases including but not limited to:
From process reactor vessel fugitive, storage, handling, ducted building exhaust

Also see Combustion, Other Processes, Solvent Use, and Storage & Handling, Appendix C-I

Miscellaneous

Acids Mfg

Adhesives & Sealants Mfg

Aerospace Chem Mfg

Beryllium

Any of the following types of chemicals, listed in Appendix A-I or A-II: FEEDSTOCK CHEMICAL(S) MANUFACTURED CHEMICAL(S) BY-PRODUCT CHEMICALS

Ammonia, Bis(chloromethyl) ether, Carbon tetrachloride, Chlorine, Chloroform, Copper, Cresol, ETO, Formaldehyde, Hydrogen chloride, Lead, Methylene chloride, Naphthalene, Phenol, Toluene, Toluene diisocyanate, TCA

Acetaldehyde, Acrolein, Copper, Cresols, Hydrochloric acid, Phenol, Toluene, Xylenes

Ammonia, Arsenic, Asbestos, Benzene, 1,4-Dioxane, EDC, Lead, Methylene chloride, Nitrosomorpholine, Toluene, TCA, TCE, Xylenes

Chloroform, EDC, Phosgene, Toluene

Type(s) of Emissions/ Emitting Process Points

Chemical Mfg continued Agricultural Chem Mfg Miscellaneous

Alkali Mfg - see Chemical Mfg, Industrial Inorganics, Appendix C-II Fertilizers

Nitrogenous

Phosphatic

Mixing Only Sodium Arsenate

Aldehyde Mfg

Anti corrosives Mfg

Bases Mfg

Carbon Black & Charcoal Mfg

Combustion Processes - see Combustion, Appendix C-I

Chemical Preparations

Chlorine (Electrolytic)

Production From: hydrogen stream
Also see Chem Mfg, Industrial Inorganics, Alkalies & Chlorine, Appendix C-II

Some Specific Substances (Including, but not limited to)

Acetaldehyde, Acrolein, Acrylonitrile,
Ammonia, Arsenic, Benzene, 1,3-Butadiene,
Cadmium, Carbon tetrachloride, Chlorine,
Chlorobenzene, Chloroform, Copper, Cresol,
1,4-Dichlorobenzene, Dimethyl sulfate, EDC,
EDB, ETO, Formaldehyde, Hexachlorobenzene,
Hexachlorocyclopentadiene, Hydrazine,
Hydrogen chloride, Hydrogen sulfide, Lead,
Maleic anhydride, Mercury, Methyl bromide,
Methyl isocyanate, Methylene chloride,
Naphthalene, Phenol, Phosgene, Phthalic
anhydride, Vinyl chloride, Xylenes, Zinc,
Zinc oxide

Ammonia, Hydrogen sulfide, Mercury, Metal compounds, Methanol, Phosphorus, Sodium hydroxide
Ammonia, Cadmium, Hydrogen sulfide, Lead Nickel
Ammonia, Arsenic, Cadmium, Hydrogen sulfide
Ammonia
Arsenic

Aldehydes, Toluene

Cresols, Hydrazine

Ammonia, Hydrazine, Sodium hydroxide

Ammonia, BaP & other PAHs*, Formaldehyde, Hydrogen sulfide, POM Any other listed metals

Ammonia, Arsenic, Benzene, Cadmium, Chlorine, Chromium, Copper, Formaldehyde, Hexachlorocyclopentadiene, Hydrazine, Hydrogen chloride, Hydrogen sulfide, Lead, Maleic anhydride, Methyl isocyanate, Methyl methacrylate, Perc, Radionuclides, Styrene, Toluene, TCE, Vinyl chloride, Xylenes, Zinc, Zinc oxide

Mercury

Type(s) of Emissions/ Emitting Process Points

Chemical Mfg continued
Drug/Pharmaceutical Mfg
Miscellaneous

Biological Products Medicinals & Botanicals

Blender
Combustion Processes - see Combustion, Appendix C-I
Drying Ovens
Formulator
Other Process Reactors
Solvents - see Solvent Use, Appendix C-I
Sterilizers - see Sterilizers, Appendix C-I
Tanks - see Liquid Storage & Transfer, Appendix C-I

Dyes Mfg

Elastomer & Surfactant Mfg Batch Processes

Ethers Mfg Dimethyl sulfate, Nitrobenzene, Propylene

Ethylene dichloride Pro Oxychlorination Air & Oxygen Proc

From: vents, storage

Explosives

Some Specific Substances (Including, but not limited to)

Acrylonitrile, Allyl chloride, Ammonia,
Arsenic, Benzene, Benzyl chloride, Carbon
tetrachloride, Chlorine, Chlorobenzene,
Chloroform, Chromium, 1,4-Dichlorobenzene,
Dimethyl sulfate, 1,4-Dioxane, Epichlorohydrin, EDB, EDC, Formaldehyde, Hydrazine,
Hydrogen chloride, Lead, Mercury, Methanol,
Methyl methacrylate, Methylene chloride,
Perc, Phenol, Phosgene, Styrene, Toluene,
TCA, TCE, Vinylidene chloride, Xylenes,
Zinc, Zinc oxide
Arsenic, Benzene, EDC, Lead, TCA

Acrylonitrile, Ammonia, Arsenic, Benzene, Carbon tetrachloride, Chloroprene, Chlorine, EDC, Formaldehyde, Hydrogen chloride, Lead, Mercury, Methyl bromide, Methyl methacrylate, Methylene chloride, Phenol, Styrene, Toluene, Vinylidene chloride

Benzene, Benzidine, Benzyl chloride, Chlorobenzenes, Chloroform, Cresols, Dichloromethane, Dimethyl sulfate, Dioxane, C.l. Direct Black 38, Hydrazine, POM, PAHs*, TCE, Vinyl chloride, Vinylidene chloride

Epichlorohydrin

oxide

Carbon tetrachloride, Chloroform, ethylene dichloride

Acetaldehyde, Ammonia, Arsenic, Formaldehyde, Lead, Mercury, Nitrobenzene, Phenol, Toluene

Type(s) of Emissions/ Emitting Process Points

Chemical Mfg continued

Fertilizers - see Chemical Mfg (Agricultural), Appendix C-II

Flame Retardants Mfg

Fluorocarbon Mfg
Reactor Venting
Distillation
Storage

From: vents, storage

Indust Inorg Chem Mfg
Miscellaneous

Alkalies & Chlorine

Cyclic Crudes & Intermediates

Some Specific Substances (Including, but not limited to)

Hexachlorocyclopentadiene

Carbon Tetrachloride, Chloroform

Acetaldehyde, Acrolein, Acrylonitrile, Allyl chloride, Ammonia, Arsenic, Asbestos, Benzene, Benzidine, Benzyl chloride, 1,3-Butadiene, Cadmium, Carbon tetrachloride, CFC 113, Chlorine, Chlorobenzene, Chloroform, Chromium, Copper, 1,4-Dichlorobenzene, Epichlorohydrin, EDB, EDC, ETO, Formaldehyde, Freon 113, Gasoline vapors, Hexachlorobenzene, Hexachloropentadiene, Hydrogen chloride, Hydrogen sulfide, Lead, Maleic anhydride, Manganese, Mercury, Methyl isocyanate, Methyl methacrylate, Methylene chloride, Naphthalene, Nickel, Nitrobenzene, Nitrosomorpholine, Perc, Phenol, Phosgene, Phosphorus, Phthalic anhydride, PCBs, Propylene oxide, Radionuclides, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Vinyl chloride, Vinylidene chloride, Xylenes, Zinc, Zinc oxide Ammonia, Arsenic, Asbestos, Benzene, 1,3-Butadiene, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Formaldehyde, Hydrogen chloride, Mercury, Phosgene, Toluene, TCE, Vinyl chloride, Vinylidene chloride

Accetaldehyde, Acrolein, Acrylonitrile, Ammonia, Arsenic, Benzene, Benzidine, Benzyl chloride, 1,3-Butadiene, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Chromium, Cresol, Dibenzofurans, 1,4-Dichlorobenzene, 3,3'-Dichlorobenzidene, Dimethyl sulfate, 1,4-Dioxane, EDC, Formaldehyde, Gasoline vapors, Hexachlorobenzene, Hydrazine, Hydrogen chloride, Hydrogen sulfide, Maleic anhydride, Methyl bromide, Methyl isocyanate, Methylene chloride, Naphthalene, Nitrobenzene,

Type(s) of Emissions/ Emitting Process Points

Chemical Mfg, Cyclic Crudes, continued

Gum & Wood Chemicals

Wood Chem Mfg Cresol Cresylic Acid Phenol Industrial Gases

Pigments, Inorgan

Inks

Miscellaneous Printing

Metal Chelating Agent Mfg Corrosion Inhib, Metal Treatment Chems

Methionide Analogs Prod (poultry feed supp.)

Methyl Chloroform Prod

From: hydrochlorinated vent condenser, steam stripper vent condenser

Military Chem Prod

Monomers

Miscellaneous

Some Specific Substances (Including, but not limited to)

Nitrosomorpholine, Pentachlorophenol (Chlorophenols), Phenol, Phosgene, Phthalic anhydride, POM, PAHs*, Styrene, Toluene, Toluene diisocyanate, TCE Xylenes, Vinyl chloride
Arsenic, Benzene, BaP & other PAHs*, Chromium, Formaldehyde, Naphthalene, POM, Toluene diisocyanate
Cresols, Phenol, Xylenes

Arsenic, Beryllium, Carbon tetrachloride, ETO, Hydrogen chloride, Mercury Ammonia, Arsenic, Cadmium, Chloroform, Chromium, Copper, Dimethyl sulfate, 1,4dioxane, Hydrazine, Hydrogen chloride, Lead, Zinc, Zinc oxide

Dioxane, Toluene Ammonia, Arsenic, Benzene, Cadmium, Copper, Formaldehyde, Lead, Perc, Toluene, Vinyl chloride, Xylenes, Zinc

Cupferron, Thiourea

Acrolein

Ethylene dichloride

Chloroform, EDC, Phosgene, Toluene

Acetaldehyde, Acrylonitrile, Ammonia, Benzene, 1,3-Butadiene, Carbon tetrachloride, Chlorine, Chlorofluorocarbons, Dioxane, Epichlorohydrin, Ethyl chloride, EDB, EDC, ETO, Formaldehyde, Glycol ethers, Hydrochloric acid, Isocyanates, Maleic anhydride, Methyl bromide, Methyl methacrylate, Methylene chloride, Naphthalene, Nitrobenzene, Perc, Phenol, Phthalic anhydride,

Type(s) of Emissions/ Emitting Process Points

Chemical Mfg, Monomers, continued

Vinyl Chloride

From: heavy ends stream

Nuclear Fuel Fabrication

Organic Chem Mfg

Paints & Allied Prod's

Pigment

Perfume

Pesticides, Herbicides, Fungicides Mfg

Photographic Chemicals Mfg

Pigment (metal containing) Mfg
Also see Chem Mfg, Inks and Paints, Appendix C-II

Plastics Materials & Synthetics

Some Specific Substances (Including, but not limited to)

PCBs, Propylene, Propylene oxide, Sodium hydroxide, Styrene, Toluene, TCA, TCE, Trichlorophenol, Urethane, Vinyl chloride, Vinylidene chloride, Xylenes, Zinc

Radionuclides

Acrylamide, Acrylonitrile, Carbon tetrachloride, Chlorobenzene, Chloroform, Methylene chloride, Perc, Toluene

Acetaldehyde, Ammonia, Arsenic, Asbestos,
Benzene, Butadiene, Carbon tetrachloride,
Chloroform, Chlorophenols, Chromium, Copper, Cresol, 1,4-Dioxane, Epichlorohydrin,
Formaldehyde, Glycol ethers, Lead, Mercury,
Methyl methacrylate, Methylene chloride,
Naphthalene, Nickel, Nitrobenzene, Perc,
Phenol, Phthalic anhydride, Styrene, Toluene,
Toluene diisocyanate, TCA, TCE,
Zinc, Zinc oxide
Benzyl chloride, Cadmium, Toluene

Dimethyl sulfate

Arsenic, Benzene, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Chloropicrin, Cresols, 1,4-Dichlorobenzene, Dimethyl sulfate, Dioxins, EDB, Hexachlorocyclopentadiene, Hydrazine, Hydrocyanic acid, Isocyanates, Lead arsenate, Methyl bromide, Naphthalene, N-Nitrosodimethylamine, Phenol, Phosphorus

Methylene chloride

Cadmium, Chromium, Copper, Lead, Nickel, Zinc

Acrylamide, Acrylonitrile, Acrolein, Ammonia, Arsenic, Benzene, Benzidine, Cadmium, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Chromium, Cresols, Dichloromethane, Dioxins, Formaldehyde, Hydrazine, Hydrocyanic acid, Hydrochloric acid, Hydrogen fluoride, Hydrogen sulfide, Isocyanates, Mercury, Methylene chloride, Nickel, Perc, Phenol, Phosgene, POM, PAHs*, Sodium hydroxide, Toluene, TCE, Vinyl chloride, Vinylidene chloride, Zinc

Type(s) of Emissions/ Emitting Process Points

Chemical Mfg, Plastics, continued

Cellulosic Man-Made Fibers

Organic Fibers, noncellulosic

Plastics/Resins

Resin Mfg.

Rubber Production & Compounding Synthetic Monomers

Gaseous, Aerosol, & Particulate releases including but not limited to:

Retardants Catalysts Solvents Miscellaneous

Also see Chem Mfg, Monomers, Appendix C-II Synthetic Fibers

Polish & Wax Mfg

Some Specific Substances (Including, but not limited to)

Ammonia, Arsenic, Benzene, Chlorine, EDC, Hydrogen chloride

Acrylonitrile, Copper, Dimethyl sulfate, EDC, Toluene diisocyanate, Vinylidene chloride Acetaldehyde, Acrolein, Acrylonitrile, Allyl chloride, Ammonia, Arsenic, Asbestos, Benzene, 1,3-Butadiene, Cadmium, Carbon tetrachloride, Chlorine, Chloroethane, Cresol, Epichlorohydrin, EDC, ETO, Formaldehyde, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Lead, Maleic anhydride, Mercury, Methyl methacrylate, Methylene chloride, Nitrobenzene, Perc, Phenol, Phosgene, PCB, Propylene oxide, Styrene, Toluene, Toluene diisocyanate, TCE, Vinyl chloride, Vinylidene chloride, Xylenes, Zinc oxide Acrylamide, Acrylonitrile, Ammonia, Benzene, Bis(chloromethyl) ether, Cresols,

Acrylonitrile, 1,3-Butadiene, Chloropyrene, Epichlorohydrin, Ethyl acrylate, EDC, ETO, Propylene, Styrene n-Nitrosodiphenylamine, Phthalic anhydride Nickel Toluene

Dioxins, Epichlorohydrin, Formaldehyde, Hexachlorocyclopentadiene, Maleic anhydride,

Phenol, Vinylidene chloride, Xylenes

Acetaldehyde, Acrylonitrile, Allyl chloride Ammonia, Benzene, Benzidine, 1,3-Butadiene, Carbon tetrachloride, Chlorine, Chloroform, Chloroprene, 3,3-Dichlorobenzidine, Epichlorohydrin, EDC, Hydrogen chloride, Lead, Maleic anhydride, Methylene chloride, Nitrosomorpholine, Perc, Sodium hydroxide, Styrene, Toluene, Toluene diisocyanate, Vinylidene chloride

Hydrogen sulfide

Chloroform, Dioxane, Nitrosomorpholine

Type(s) of Emissions/ Emitting Process Points

Chemical Mfg continued

Preservatives, disinfectants, biocides -

Rubber, Non-Vulcanized, Mfg

Rubber Compounding

Processing Aids Accelerators

Age Restorers Vulcanizing Agents Accelerator Activators

Solvents Mfg

Soap, Cleaners, & Toilet Goods

Soap & Detergent Mfg
Miscellaneous

Optical Brighteners Polishes & Sanitation Goods

Surface Active Agents

Toilet Preparations

Textile Chemical Mfg

Varnish Mfg

(High)-Vinylidene Chloride Copolymer Fabric Process

Wax Mfg - see Polish Mfg, Appendix C-II

Some Specific Substances (Including, but not limited to)

Cresols, Formaldehyde, Mercury, Phenol, 2,4,5-Trichlorophenol, Zinc Oxide

Dioxins, Formaldehyde, Phenols

Zinc
Ethylene thiourea, n-Nitrosodimethylamine,
Zinc
Nickel, Phenol
Lead, Selenium, Zinc
Zinc, Lead, Ammonia

Chloroform, Dioxins, Formaldehyde

Glycol ethers, Methanol, Dioxane

Ammonia, Chlorine, Hydrogen chloride

Benzene, EDC, ETO, Formaldehyde, Hydrogen sulfide, Methyl methacrylate, Toluene Nitrosomorpholine

Ammonia, Arsenic, Benzene, Carbon tetrachloride, Chlorine, Chloroform, Cresol,
1,4-Dichlorobenzene, 1,4-Dioxane,
Epichlorohydrin, Formaldehyde, Hydrogen
chloride, Methylene chloride, Nitrobenzene,
Perc, Toluene, TCA, TCE, Zinc, Zinc oxide
Benzene, Benzyl chloride, 1,4-Dioxane,
Propylene oxide, Toluene, Zinc, Zinc oxide
Acetaldehyde, Acrolein, Ammonia, Arsenic,
Benzene, Benzyl chloride, CFC-113,
Dimethyl sulfate, 1,4-Dioxane, Formaldehyde,
Methylene chloride, Perc, Toluene, TCA,
TCE, Zinc, Zinc oxide

Acetamide, 2,4-Diaminoanisole, 2,4-Diaminoanisole sulfate, Urethane

Benzene, Dioxane

Vinylidene Chloride

Type(s) of Emissions/ Emitting Process Points

Chemical Mfg continued

Wood Chem Mfg - see Chem Mfg, Indus Inorgan, Gum & Wood, Appendix C-II

Chemicals, Sales

Storage & Handling - see Liquid Storage & Transfer, Appendix C-I

Chrome Plating - see Metal Plating, Appendix C-II

Clay, Glass & Stone Pro Miscellaneous

Abrasive Products

Asbestos Mill/Processing

Cement Products Floor Tile Friction Material Textiles

1 TEXCITE

Cement Mfg Particulate, Gaseous, Aero Emis

including but not limited to:
 From stacks, feed to mill & air
 separator, kiln, dryers, grinders

Clinker Cooler Combustion Processes

Benzene, Formaldehyde, Hydrogen chloride,

Also see Combustion, Appendix C-I Dry Processes Hydraulic

Wet Process
Clay Products, Structural
Brick & Structural
Clay Tile
Ceramic Wall &
Floor Tile
Clay Refractories

Some Specific Substances (Including, but not limited to)

Ammonia, Benzene, 1,3-Butadiene, Hydrogen chloride, Methylene chloride, Styrene, Toluene, TCA, Vinyl chloride

Ammonia, Arsenic, Cadmium, Chlorine, Chromium, Hydrogen chloride, Lead, Mercury, Nickel, Silica, Toluene, TCA, TCE Ammonia, Cadmium, Chlorine, Chromium, Formaldehyde, Hydrogen chloride, Lead, Manganese, Methylene chloride, Perc, Phenol, Styrene, Toluene, TCA,

Xylenes, Zinc
Asbestos, Benzene, Chromium, Copper,
Nickel, Silica
Formaldehyde, Hydrogen sulfide,
Naphthalene, TCA, Xylenes

Asbestos, BaP, Benzene, Beryllium, Cadmium, Chromium, Copper, Formaldehyde, Hydrogen chloride, Lead, Manganese, Nickel, PCBs, POM, PAHs*, Zinc, All listed metals

PCBs, POM, PAHs*, All listed metals

Arsenic, Cadmium, Chlorine, Chromium, Copper, Hydrogen chloride, Lead, Mercury, Nickel, Toluene, Zinc

Arsenic, Beryllium, Lead

Arsenic, Beryllium, Lead Beryllium, Chromium, Mineral fibers

Type(s) of Emissions/ Emitting Process Points

Clay, Glass & Stone Pro continued Concrete, Gypsum, & Plaster Products Concrete Block & Brick Concrete Products

Ready-mixed Concrete Lime Cut Stone & Stone Prod Flat Glass

Gaskets, Packing, & Sealing Devices

Glass & Glassware, Pressed & Blown

Glass Container Mfg

From glass furnace

Minerals, Ground or Treated

Mineral Wool Prod

Nonclay Refractories

Nonmetallic Mineral Prod

Pottery & Related Prod Vitreous Plumbing Fixtures Fine Earthen Food Utensils

Purchased Glass Products

Combustion Processes - see Combustion, Appendix C-I Other Processes - see Other Processes, Appendix C-I

Coal Combustion - see Combustion, Appendix C-I

Coal, Wholesaling

Coke Combustion - see Combustion, Appendix C-I

Some Specific Substances (Including, but not limited to)

Chromium, Styrene
Ammonia, Chromium, Gasoline vapors, Toluene,
Zinc
Asbestos, Hydrogen sulfide
Mercury
TCE
Ammonia, Arsenic, Cadmium, Chlorine,
Chromium, Hydrogen, Nickel, Toluene

Ammonia, Asbestos, Chlorobenzene, Gasoline vapors, Hydrogen chloride, Lead, Toluene, TCE, Zinc

Ammonia, Arsenic, Cadmium, Chlorine, Chromium, Formaldehyde, Hydrogen chloride, Lead, Mercury, Methylene chloride, Nickel, Perc, Styrene, Toluene, TCA Arsenic Arsenic, Chlorine, Hydrogen chloride, Methylene chloride

Chlorine, Chromium, Copper, Gasoline vapors, Hydrogen chloride Ammonia, Carbon tetrachloride, Formaldehyde, Mineral fibers, Phenol Ammonia, Beryllium, Chromium, Formaldehyde, Hydrogen chloride, Mineral fibers, Phenol, Zinc, Zinc oxide Chlorine, Copper, Hydrogen chloride, Mineral fibers, Styrene, Toluene

Styrene, Toluene Ammonia, Beryllium, Copper, Hydrogen sulfide, Lead, Methyl bromide, Naphthalene, Perc, Toluene, TCE, Zinc Ammonia, Toluene, TCE, Kylenes

Zinc, Zinc oxide

Lead, TCA

Type(s) of Emissions/ Emitting Process Points

Coke Production
Also see Metal Smelters, Appendix C-II

Colleges & Universities Miscellaneous

Also see Chem Mfg, Appendix C-II Combustion, Appendix C-I Research & Development, Appendix C-II Solvent Use, Appendix C-I

Combustion Processes - see Combustion, Appendix C-I

Commercial/Institutional Combustion - see Combustion, Appendix C-I

Cooling Towers - see Other Processes, Appendix C-I

Correctional Institutions - see Combustion, Appendix C-I

Cotton Ginning - see Agricultural Prod, Appendix C-II

Crop Production - see Agricultural Prod, Appendix C-II

Dry Cleaning Operations

Dyeing of Textiles

Gaseous, aerosol, and particulate releases, including but not limited to:

Due to toxics in the solutions Fixatives
Oxidizing Agents
Dyeing Aids

Combustion Processes - see Combustion, Appendix C-I

Elec. or Natural Gas Service Combustion Processes - see Combustion, Appendix C-I Cooling Towers - see Other Processes, Appendix C-I

Electrical Assembly Cleaning - see Degreasing, Appendix C-I

Electrical & Electronic Equip Miscellaneous Some Specific Substances (Including, but not limited to)

POM, PAHs*, Toluene

Benzene, Carbon tetrachloride, Chloroform, Methylene chloride, Dioxane, Formaldehyde, Mercury, Nitrobenzene, Phenol, Toluene, TCA, Xylenes, Any other listed substance

Chlorinated Fluorocarbon, EDC, Perc, Toluene, TCA, TCE

Dyes - Auramine, Direct Black 38, Copper, Chromium Copper, Chromium Chromium Formaldehyde, Perc, Sodium hydroxide (caustic soda)

TCA

Freon 113, Methylene chloride, Perc, TCA, TCE

Type(s) of Emissions/ Emitting Process Points

Electric & Electronic Equip continued Communication Equipment Radio & TV Communication Equipment

> Telephone & Telegraph Apparatus

Electric Distrib Equip Transformers

Switchgear & Switchboard Apparatus

Electrical Industrial Apparatus

Motors & Generators

Industrial Controls Welding Apparatus, Electric Carbon & Graphite Products

Electronic Components & Accessories

Batteries
Primary,
Dry & Wet

Storage

Cat'd Ray Pict'r Tubes

Some Specific Substances (Including, but not limited to)

Ammonia, Benzene, Chlorine, Copper, Formaldehyde, Hydrogen chloride, Hydrogen sulfide, Lead, Methylene chloride, Perc, Toluene, Toluene diisocyanate, TCA, TCE, Xylenes, Zinc

Ammonia, Copper, Formaldehyde, Hydrogen chloride, Methylene chloride, Perc, Styrene, Toluene, TCA, TCE, Xylenes Ammonia, Naphthalene, Toluene, TCA, TCE Ammonia, Beryllium, Hydrogen chloride, Lead, Methylene chloride, Naphthalene, Perc, PCB, Toluene, TCA, TCE, Vinyl chloride, Xylenes, Zinc oxide

Ammonia, Formaldehyde, Hydrogen chloride, Perc, Toluene, TCA, TCE

Ammonia, Arsenic, BaP, Copper, Hydrogen chloride, Lead, Mercury, Perc, PCB, Toluene, TCA, TCE
Ammonia, Formaldehyde, Hydrogen chloride, Lead, Naphthalene, Phenol, Styrene, Toluene, TCA, TCE
Ammonia, Styrene, Toluene, TCA, TCE

Nickel, Toluene

BaP, Chlorine, Hydrogen chloride, Hydrogen sulfide, Styrene

Acetaldehyde, Ammonia, Arsenic, Benzene, Benzyl chloride, Beryllium, Cadmium, Chlorine, Chloroform, Chromium, Copper, Epichlorohydrin, EDC, Formaldehyde, Gasoline vapors, Hydrazine, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Mercury, Methylene chloride, Naphthalene, Nickel, Perc, Phenol, Phosgene, PCB, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Xylenes, Zinc, Zinc oxide

Cadmium, Lead, Naphthalene, Nickel, Zinc, Zinc Oxide Beryllium, Cadmium, Lead, Manganese, Nickel, TCA, Zinc, Zinc oxide Beryllium, Lead

Type(s) of Emissions/ Emitting Process Points Some Specific Substances (Including, but not limited to)

Electric & Electronic Equipment Prod continued Electron Tubes, Transmitting

Electron Capacitors

Integrated Circuit Board Mfg

From: developer, stripper screening-hardener

Semiconductors & Related Devices

Solvent Stations - see Liquid Storage & Transfer, Appendix C-I

Beryllium, Toluene

Wet Chemical Stations

Mfg Process Reactors (Siliconizing)

Chemical Vapor Deposition

Diffusion Furnaces - see Combustion, Appendix C-I

Photoresist Lines

Surface Coating/Cleaning - see Solvent Use, Appendix C-I

Household Appliances

Elec Housewares/Fans

Household Cooking

Equipment

Household Laundry

Equipment

Household Refriger-

ators & Freezers

Sewing Machines

Electric Lighting &

Wiring Equipment

Electric Lamps

Lighting Fixtures

Commercial

Residential

Wiring Devices

Current-Carrying

Noncurrent-Carry

Radio & TV Rec'ving Sets

Semiconductor Production - see Electric & Electronic Equip, Integrated Circuit, Appendix C-II

Ammonia, Benzene, Beryllium, Cadmium, Chromium, Copper, Hydrogen chloride, Lead, Nickel, Styrene, Toluene, TCE, Xylenes Allyl chloride, Chromium, Epichlorohydrin, Lead, Methylene chloride, TCA, TCE Butyl cellosolve (a Glycol ether)

Formaldehyde, Methylene chloride

Acetone, Ammonia, Arsine, Arsenic, Beryllium, Chlorine, Chlorobenzene, Ethylene glycol, Hydrazine, Hydrochloric acid, Hydrogen chloride, Hydrogen fluoride, Lead, Mercury, Methanol, Methylene chloride, Nickel, Perc, Phenol, Phosphene, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Xylenes, Zinc

TCA, TCE

Perc, Toluene

Toluene

Toluene, TCA

Toluene, TCE

Ammonia, Cadmium, Mercury, Toluene, TCA, TCE

Toluene, TCA

Ammonia, Hydrazine, Toluene, TCA, TCE

Ammonia, Copper, Formaldehyde, Hydrogen chloride, Manganese, Methylene chloride, Nickel, Perc, Phenol, Toluene, Toluene diisocyanate, TCA, TCE, Zinc Copper, Hydrogen chloride, Styrene, Toluene, TCE, Vinyl chloride, Zinc Ammonia, Toluene, TCA, TCE, Xylenes

Type(s) of Emissions/ Emitting Process Points

Electric & Electronic Equip continued X-Ray Apparatus & Tubes

Elec, Gas, & Sanitary Svc's
 Electric Services

Gas & Other Svc's Water Supply

Sanitary Services

Refuse Systems

Sewerage Systems

Steam Supply

Electroplating - see Metal Plating, Appendix C-II

Extermination - see Other Processes, Pesticide Use, Appendix C-I

Felt Mfg

Fiberboard Mfg - see Wood Product Mfg, Appendix C-II

Floor Cover Mfg, Hard Surface

Floor Tile Mfg.

Food Prod Mfg
Miscellaneous
Bakery Products
Beverages
Milk (Condens & Evap)
Soft Drinks
Canned Foods
Fats & Oils
Shorten & Cook Oils
Soybean Oil Mills
Food Preparation, Misc

Some Specific Substances (Including, but not limited to)

Beryllium, Hydrogen chloride, Perc, Toluene, TCA

Acetaldehyde, Arsenic, Benzene, BaP, Beryllium, Cadmium, Chromium, Copper, Formaldehyde, Lead, Manganese, Mercury, Nickel, POM, PAHs*, PCBs, TCA Hydrogen sulfide Arsenic, Chromium, Hydrogen chloride, Hydrogen sulfide, Mercury, Perc, TCA, TCE Benzene, Chloroform, EDC, Methylene chloride, Perc, TCA, TCE, Vinyl chloride Ammonia, Arsenic, Beryllium, Cadmium, Chlorine, Chromium, Copper, Hydrogen chloride, Lead, Manganese, Mercury, Nickel, POM, PAHs*, PCBs, Toluene, Vinyl chloride, Zinc Ammonia, Arsenic, Cadmium, Chromium, Copper, Hydrogen chloride, Lead, Mercury, Nickel, Zinc Benzene, Formaldehyde, Toluene

Asbestos

Benzene

Asbestos

Perc, Toluene
Benzene, Formaldehyde, Toluene
Ammonia, Formaldehyde,
Ammonia, Benzene, Formaldehyde, Toluene
Arsenic, Toluene
Arsenic, Benzene, Formaldehyde, Toluene
EDC, Methylene chloride
Nickel, Toluene
EDC
Acetaldehyde, Benzene, Benzidene, Carbon
Tetrachloride, Chloroform, Dimethyl sulfate, Epichlorohydrin, ETO, Formaldehyde,
Maleic Anhydride

Type(s) of Emissions/ Emitting Process Points

Food Prod Mfg continued
Grain Mill Products
Prepared Feeds
Wet Corn Milling
Manufactured Ice
Meat Packing Plants
Sausages & Other
Prepared Meats

Roasted Coffee

Seafood, Canned & Cured
Sugar & Confec Prods
Beet Sugar
Confectionery Prod
Canning - see Canned Food Prod, Appendix C-II
Combustion Processes - see Combustion, Appendix C-I
Solvents - see Solvent Use, Appendix C-I
Sterilization - see Other Processes, Appendix C-I

Food Prod Machinery Mfg

Foundries - see Metal Smelters & Foundries, Appendix C-II

Forestry Services
Also see Wood, Appendix C-II

Furniture & Fixture Mfg Miscellaneous

Drapery Hardware and Blinds & Shades Household Furniture Metal Upholstered Wood

TV & Radio Cabinets Office Furniture Metal

Wood

Partitions & Fixtures
Metal
Wood
Public Bldq & Related Furn

Some Specific Substances (Including, but not limited to)

Acrolein, Methyl bromide Chlorine, Hydrochloric Acid Arsenic Arsenic, Formaldehyde, Hydrochloric Acid

Acetaldehyde, Ammonia, Arsenic, Chloroform, Formaldehyde, Phenol, Toluene, TCA Acetaldehyde, Acrolein, Methylene chloride, TCE Arsenic, Hydrogen sulfide

Beryllium Benzene, Toluene, Formaldehyde

Methylene chloride, Perc, TCA, TCE

Naphthalene

Methylene chloride, Perc, TCE Methylene chloride, Phthalic anhydride, Toluene, TCE

Benzene, TCA

Cresol, Toluene, TCE, Xylenes Cadmium, Copper, Lead, Toluene Ammonia, Methylene chloride, Naphthalene, Styrene, Toluene, TCA, TCE, Xylenes Toluene

Ammonia, Formaldehyde, Methylene chloride, Perc, Styrene, Toluene, TCA, TCE, Xylenes, Zinc Oxide Formaldehyde, Methylene chloride, Naphthalene, Toluene, Toluene diisocyanate, TCA, TCE, Xylenes

Methylene chloride, Perc, Toluene, TCA, TCE Ammonia, Toluene, Toluene diisocyanate, TCE Ammonia, Toluene, Xylenes

Type(s) of Emissions/ Emitting Process Points

Furniture & Fixture Mfg, continued

Combustion Process - see Combustion, Appendix C-I
Degreasing - see Solvent Use, Appendix C-I
Metal Working - see Metal, Appendix C-II
Surface Coating - see Solvent Use and Other Processes, Appendix C-I
Upholstery Mfg - see Textiles, Appendix C-II
Wood Working - see Wood, Appendix C-II

Furniture Stores
Furniture Repair/Reupholstering

Cleaning - see Dry Cleaning, Appendix C-II

Gas Combustion - see Combustion, Appendix C-I

Gas Stations

Liquid Storage & Transfer - see Liquid Storage & Transfer, Appendix C-I Vehicle Refueling - see Other Processes, Appendix C-I

Glass Products - see Clay, Glass & Stone Products, Appendix C-II

Grain Production - see Agricultural Prod and Food Prod, Appendix C-II

Grain Wholesaling

Grey Iron Foundries - see Metal Smelters & Foundries, Appendix C-II

Hospitals

Gen'l Medical & Surgical

Medical Labs

Combustion Processes - see Combustion, Appendix C-I Medical Instrument Mfg - see Instrument Mfg, Appendix C-II Research - see Research & Development, Appendix C-II Sterilizers - see Other Processes, Appendix C-I

Incineration - see Combustion, Appendix C-I

Industrial Combustion - see Combustion, Appendix C-I

Industrial Wastewater Treatment - see Other Processes, Appendix C-I

Inorganic Chemical Mfg - see Chemical Mfg, Inorganic, Appendix C-II

Some Specific Substances (Including, but not limited to)

Ammonia, Methylene chloride, Toluene, TCA Ammonia, Lead, Methylene chloride, Toluene, Xylenes

Benzene, EDB, EDC, Gasoline vapors, Toluene, Xylenes

Ammonia

ETO, Hydrogen chloride, Hydrogen sulfide, Phenol, Styrene ETO Type(s) of Emissions/ Emitting Process Points

Instruments & Related Prod's
 Engineering & Science Instr

Meas & Controlling Devices
Environmental Controls

Process Control Inst

Electricity Measuring Instruments Medical Instr & Supplies Dental Equip & Supp

> Ophthalmic Goods Photographic Equip & Supplies

Surgical & Med Instr Srg Appliances & Sup

Optical Instr & Lenses

Watches/Clocks/Watchcases
Plating - see Metal Plating, Appendix C-II

Also see - Combustion, Other Processes, and Solvent Use Appendix C-I Metal, Plastic, and Rubber, Appendix C-II

Jewelry, Silverware, & Plated Ware
Jewelry, Costume

Jewelry, Precious Metal

Jewelers Materials & Lapidary Work

Some Specific Substances (Including, but not limited to)

Freon 113, Toluene, TCA
Ammonia, Arsenic, Asbestos, Beryllium,
Cadmium, Chromium, Copper, Formaldehyde,
Hydrogen chloride, Lead, Methylene chloride,
Perc, Phenol, Toluene, TCA, TCE, Zinc
Ammonia, ETO, Mercury, Toluene
Beryllium, Chlorine, Hydrogen chloride,
Mercury, TCE
Beryllium, Cadmium, Hydrogen chloride,
Toluene, Zinc, Zinc oxide

Beryllium, Toluene, TCA Ammonia, Hydrogen chloride, Toluene, TCE Ammonia, Cadmium, Chlorine, ETO, Formaldehyde, Phenol, Toluene, TCA, Zinc, Zinc oxide Ammonia, TCA, TCE

Acetaldehyde, Acrylonitrile, Ammonia, Arsenic, Asbestos, Benzene, Benzidine, Benzyl chloride, Bis(chloromethyl) ether, Cadmium, Carbon tetrachloride, Chlorine, Chlorobenzene, Chloroform, Chromium, Dimethyl sulfate, 1,4-Dioxane, Epichlorohydrin, EDC, Formaldehyde, Hydrazine, Hydrogen chloride, Lead, Mercury, Methylene chloride, Naphthalene, Nickel, Perc, Phenol, Phosgene, Propylene oxide, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Vinyl chloride, Vinylidene chloride, Xylenes, Zinc, Zinc oxide ETO, Formaldehyde, Perc, Toluene, TCA, TCE, Zinc Ammonia, Chromium, ETO, Formaldehyde, Hydrogen chloride, Lead, Nickel, Toluene, TCA, Vinylidene chloride Acetaldehyde, Formaldehyde, Methylene chloride, Toluene, TCA, TCE Hydrogen chloride, Toluene, TCE

Ammonia, Chlorine, Hydrogen chloride, Lead, Perc, Toluene, TCE Ammonia, Freon 113, Hydrogen chloride, Lead, Toluene, TCA, TCE Ammonia, Hydrogen chloride, Lead

Type(s) of Emissions/ Emitting Process Points

Jewelry, Silver & Plated Ware continued Silverware & Plated Ware

Degreasing - see Solvent Use, Appendix C-I

Landfills
Gas Recovery

Refuse Landfills Combustion Processes - see Combustion, Appendix C-I Fugitives - see Liquid Storage & Transfer, Appendix C-I

Laundry, Cleaning, & Garment Svc's - see Dry Cleaning, Appendix C-II

Leather & Leather Products
Leather Tanning &
Finishing

Footwear, not rubber Personal Leather Goods Tanning Processes

Tanning agents

Dyes, pigments, & coloring agents

Miscellaneous

Combustion Processes - see Combustion, Appendix C-I Liquid Storage and Transfer - see Liquid Storage & Transfer, Appendix C-I Surface Coating - see Solvent Use and Other Processes, Appendix C-I

Lumber Prod Mfg - see Wood Product Mfg, Appendix C-II

Machinery Mfg, Except Electrical

Construction & Related
Machinery
Construction Machinery

Conveyors & Conveying Equipment Elevators & Moving Stairways Hoists, Cranes, & Monorails Indstl Trucks/Tractors Some Specific Substances (Including, but not limited to)

Ammonia, Beryllium, Hydrogen chloride, Lead, TCE

Benzene, Methylene chloride, Perc, TCE, Vinyl chloride, Vinylidene chloride Asbestos

Arsenic, Chromium Copper, Formaldehyde,
Lead, Naphthalene, Toluene
Toluene
Toluene, TCE
Chromium, Cresols, Formaldehyde, Phenol
Cresols, Formaldehyde, Phenol
Cadmium, Chromium, Copper, Direct Black 38,
Lead, Nickel, Zinc compounds
Ammonia, Chlorine, Chloroform, 1,2-Dichlorobenzene, Glycol ethers, Hydrochloric acid,
Methylene chloride, Perc, Sodium hydroxide,
Toluene, TCA, TCE, Xylenes

Ammonia, Formaldehyde, Freon 113, Methylene chloride, Nickel, Phenol, Toluene, TCA, TCE

Carbon tetrachloride, Hydrogen chloride, Perc, Toluene

Ammonia, Toluene, TCE

Toluene

Ammonia, Cadmium, Copper, Lead, Zinc Perc, Toluene

Type(s) of Emissions/ Emitting Process Points

Machinery, Construction Related continued
Oil Field Machinery
Engines & Turbines
Internal Combustion
Engines

Farm Machinery & Equip
Turbines & Turbine
Generator Sets

General Industrial Machinery

Bell & Roller Bearings Blowers & Fans

Comprsrs, Air & Gas
Industrial Furnaces
& Ovens
Industrial Patterns
Power Transmission
Equipment
Pumps & Pumping
Equipment
Speed Changers,
Drives & Gears
Metalworking Machinery
Machine Tool Accessories

Machine Tools, Metal Cutting Types Machine Tools, Metal Forming Types

Rolling Mill Machinery Special Dyes, Tools, Jigs, & Fixtures

Office & Computing Machines Miscellaneous Calculating & Accounting Machines Some Specific Substances (Including, but not limited to)

Chromium, Lead, Nickel, TCA, Xylenes

Ammonia, Benzene, EDB, EDC, Gasoline vapors, Hydrazine, TCA Toluene

Ammonia, Formaldehyde, Hydrogen chloride, Maleic anhydride, Perc, Phenol, Styrene, Toluene, Toluene diisocyanate, TCA, Xylenes Ammonia, Chromium, Copper, Cresol, Epichlorohydrin, Formaldehyde, Hydrogen chloride, Lead, Nickel, Phenol, Toluene, TCA, TCE, Zinc oxide Copper, Naphthalene, Toluene, TCA

Copper, Gasoline vapors, Lead, Toluene, TCA, TCE Toluene Arsenic, Copper, Hydrogen chloride, Lead, Toluene, TCE, Zinc Formaldehyde, Phenol Ammonia, Copper, Hydrogen chloride

Ammonia, Formaldehyde, Hydrogen chloride, Lead, Perc, Phenol, Toluene, TCA, Xylenes Perc, Toluene, TCA

Arsenic, Perc

Ammonia, Beryllium, Chromium, Hydrogen chloride, Toluene, TCA, TCE

Ammonia, Lead, Toluene, TCE

Ammonia, Benzene, Lead, Perc, Toluene, TCA, TCE

Cadmium, Chromium, Zinc, Zinc oxide

1,4-Dichlorobenzene, Formaldehyde, Hydrogen chloride, Methylene chloride, Naphthalene, Toluene, TCE, TCA, Zinc

CFC-113, Hydrogen chloride, Toluene, TCA
Arsenic, Hydrogen chloride, TCA

Type(s) of Emissions/ Emitting Process Points

Machinery, Office & Computing, continued Electronic & Computing Equipment

Also see - Electric & Electronic, Appendix C-II Typewriters

Refrigrat'n & Svc Machin
Automatic Merchandising Machines
Commercial Laundry
Equipment
Measur & Dispens Pumps
Refrig & Htg Equip

Misc Svc Indus Mach Special Industry Machinery

> Food Prods Machinery Paper Indus Machin Printing Trades Mach

Textile Machinery Woodworking Machin

Combustion Processes - see Combustion, Appendix C-I Metal Forming - see Machining Mfg and Metal Forming, Appendix C-II Surface Coating/Degreasing - see Solvent Use and Other Processes, Appendix C-I

Machining - see Metal Forming, Metal Prod Fabrication, and Metal Smelting, Appendix C-II

Magazine (Periodical) Publishing - see Printing & Publishing, Appendix C-II

Mechanical Assembly Cleaning - see Solvent Use, Degreasing, Appendix C-I

Metal Forming
Aluminum Forming
Machining
Also see - Metal Product Fab and Metal Smelters, Appendix C-II

Some Specific Substances (Including, but not limited to)

Ammonia, Arsenic, Asbestos, Benzene, Benzidine, BaP, Bis(chloromethyl)ether, Chlorine, Chloroform, Chromium, Copper, Freon 113, Hydrogen chloride, Hydrogen sulfide, Lead, Methylene chloride, Naphthalene, Nickel, Nitrobenzene, Perc, Phenol, Toluene, TCA, TCE, Vinyl chloride, Zinc

Ammonia, Benzene, Beryllium, Cadmium, Formaldehyde, Hydrogen chloride, Lead, Nickel, Toluene, Xylenes

Toluene

Arsenic, Perc, Toluene Toluene Ammonia, Copper, Formaldehyde, Freon 113, Hydrogen sulfide, Lead, Methylene chloride, Phthalic anhydride, Toluene, TCA, TCE, Xylenes, Zinc Toluene Ammonia, Arsenic, Benzene, Chromium, Copper, Lead, Methylene chloride, Perc, Toluene, TCA, TCE Arsenic Ammonia, Perc, Toluene, TCE Ammonia, Chromium, Lead, Methylene chloride, Toluene, Toluene diisocyanate, TCA, Zinc oxide Toluene, TCE, Xylenes Chlorine, Hydrogen chloride, Toluene

Chloroform, Methylene chloride, TCE $^{\rm TCA}$

Type(s) of Emissions/ Emitting Process Points

Metal Furniture Mfg - see Furniture Mfg, Appendix C-II

Metal Plating

Particulate metals
including but not limited to:
From electrocleaning, and plating
Gaseous and aerosol releases
including but not limited to:
Alkaline cleaning agents
Acid cleaning, pickling agents
Chelating agents, solvents
Plating/other process bath compon.
Plating tank, Electric arc furnace

Electrocleaning Cleaning/Pickling Cleaning/Plating Storage/Handling

Combustion Processes - see Combustion, Appendix C-I Degreasing Processes - see Solvent Use, Appendix C-I

Storage and Handling - see Liquid Storage & Transfer, Appendix C-I

Metal Product Fabrication

Metal Cans & Shipping Containers Metal Cans

Metal Barrels,
Drums & Pails
Metal Cutlery, Handtools
& Hardware
Cutlery
Hand & Edge Tools

Hand Saws & Saw Blades Misc Hardware

Metal Foil & Leaf

Metal Forgings & Stampings Iron & Steel Forgings Auto Stampings Crowns & Closures Misc Metal Stampings Some Specific Substances (Including, but not limited to)

Cadmium, Chromium (VI), Nickel, TCA

Sodium hydroxide Chromic acid, Hydrochloric acid Nitrilotriacetic acid, Thiourea Ammonia, Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Selenium, Sodium hydroxide, Zinc

Acrylonitrile, Ammonia, 1,3-Butadiene, Cadmium, Chlorine, Copper, Formaldehyde, Freon 113, Hydrazine, Hydrogen chloride, Lead, Mercury, Methylene chloride, Perc, Styrene, Toluene, TCA, TCE, Zinc

Benzene, Lead, Perc, Toluene, TCA, TCE, Xylenes

Ammonia, Naphthalene, Toluene, TCA

Chromium, Lead, Toluene, TCE Ammonia, Chlorine, Chromium, Hydrogen chloride, Methylene chloride, Styrene, Toluene, TCA, TCE, Zinc

Copper, Lead, Nickel, Toluene, TCE, Zinc Ammonia, Chlorine, Chromium, Copper, Hydrogen chloride, Hydrogen sulfide, Lead, Methylene chloride, Naphthalene, Perc, Phenol, Toluene, TCA, TCE, Zinc, Zinc oxide Ammonia, Copper, Hydrogen chloride, Lead, Perc, Zinc, Zinc oxide

Hydrogen sulfide Ammonia, Perc, Toluene Lead Copper, Perc, Toluene, TCA, TCE

Type(s) of Emissions/ Emitting Process Points

Metal Prod Fabric continued
Misc Metal Services
Plating & Polishing

Metal Coating & Allied Services

Ordnance & Accessories Small Arms Ammunition Ammun, exc small arms Small Arms

Plumbing & Heating, except electric Metal Sanitary Ware Plumbing Fittings & Brass Goods

Heating Equipment, except electric

Screw Machine Products, Bolts, etc. Screw Machine Prod Bolts, Nuts, Rivets, & Washers

Steel Springs, exc wire Structural Metal Product Fabrication Structural Metal Fabrication Metal Doors, Sash, & Trim

Fabricated Plate Work, boiler shops

Sheet Metal Work

Architectural Metal Work Some Specific Substances (Including, but not limited to)

Toluene
Acrolein, Ammonia, Arsenic, Benzene, Cadmium,
Chloride, Chlorine, Chloroform, Chromium,
Copper, Formaldehyde, Hydrogen chloride,
Lead, Methylene chloride, Nickel,
Nitrobenzene, Perc, Toluene,
TCA, TCE, Zinc, Zinc oxide

Acetaldehyde, Arsenic, Benzene, Cadmium, Chlorine, Chromium, Copper, Formaldehyde, Hydrogen chloride, Lead, Methylene chloride, Nickel, Perc, Toluene, TCA, TCE, Xylenes, Zinc, Zinc oxide

Lead
Hydrogen sulfide, Toluene, TCE
Ammonia, Arsenic, Formaldehyde, Freon 113,
Hydrogen chloride, Lead, Phenol, Toluene,
Zinc oxide

Methylene chloride, Toluene

Ammonia, Cadmium, Formaldehyde, Hydrogen chloride, Phenol, Toluene, TCE, Zinc oxide

Ammonia, Benzene, Chromium, Formaldehyde, Perc, Phenol, Toluene

TCA, TCE

Cadmium, Hydrogen chloride, Methylene chloride, TCA, TCE, Zinc Hydrogen chloride, Toluene, TCA

Toluene

Copper, Toluene, Xylenes, Zinc oxide

Ammonia, Cadmium, Formaldehyde, Perc, Toluene, TCA, Xylenes, Zinc

Copper, Gasoline vapors, Hydrogen chloride, Lead, Perc, Styrene, Toluene, TCA, TCE Ammonia, Perc, Toluene, Toluene diisocyanate, TCA, TCE

Ammonia, Copper, Perc, Toluene, TCA, TCE

Type(s) of Emissions/ Emitting Process Points Some Specific Substances (Including, but not limited to)

Ammonia, Benzene, Toluene

Toluene, Xvlenes

Metal Prod Fabric, Structural Metal, continued
Prefabric Metal Bldgs
Misc Metal Work
Valves & Pipefittings
Wire Product Fabrication

Combustion Processes - see Combustion, Appendix C-I Degreasing - see Solvent Use, Appendix C-I Forming - see Metal Forming and Metal Smelters, Appendix C-II Surface Coating - see Solvent Use, Appendix C-I

Metal Smelters & Foundries - (for non-metals mining see Mining, Appendix C-II)

For any type of metal smelter - see Combustion and Liquid Storage & Transfer, Appendix C-I

For any type of metal smelter

Primary Aluminum Pro

Furnace Tapping Coke Quenching Furnace Charging Metal Forming

Secondary Aluminum
Furnace Tapping
Furnace Charging
Metal Casting
Metal Forming

Beryllium Alloys
Molding
Primary Cadmium Pro
Material Prep
Metal Casting

Mining Operations
Cadmium-Nickel Battery
Material Prep

Chromite Ore Refining

Metallurgical Coke Gaseous, aerosol
Coke Oven Charging/ including bu
Pushing From the coke oven, vessels, matr'l
Material Prep storage and
Coke Quenching storage pile

Coke Production

Gaseous, aerosol, particulate releases including but not limited to:

From the calciner, furnace, mat'l crusher/mill, storage & handling, service road, prebake/reduction/ soderberg stud cell

Anode bake furnace
Gaseous, aerosol, particulate releases including but not limited to:

From the furnace, and the service road

Gaseous, aerosol, particulate releases including but not limited to: Gaseous, aerosol particulate releases including but not limited to: From the furnace, condenser, material storage and handling Gaseous, aerosol, particulate releases including but not limited to: From the sintering machine, and material storage and handling Gaseous, aerosol, particulate releases including but not limited to: From dryer, mill, cyclone, storage Gaseous, aerosol particulate releases including but not limited to: storage and handling, and outdoor storage pile

Copper, Phenol, Toluene, TCA, TCE, Zinc Ammonia, Hydrogen chloride, Nickel, Perc, Toluene, TCA, Vinyl chloride

Hydrogen sulfide, All listed metals

Benzene, Chloroform, Cresols, Fluorides, Methylene chloride, POM, PAHs*, TCE

Benzene, Cresols, POM, PAHs*

Nickel

Chloroform, Methylene chloride, TCE

Beryllium

Cadmium

Cadmium, Lead, Nickel

Chromium

Acetaldehyde, Benzene, Cresols, Formaldehyde, Phenol, Toluene, Xylenes Ammonia, Arsenic, Beryllium, Cadmium, Hydrogen sulfide, Lead, Manganese, Mercury, Nickel, POM, PAHs* POM, PAHs*, Toluene

Industry/	
Emitting	Process

Malleable Iron Foundries

Steel Investment Fndrs

Type(s) of Emissions/ Emitting Process Points

Metal Smelters & Foundries continued Primary Copper Smelt Converter Charging Furnace Tapping Furnace Charging Material Prep Metal Casting Slag Dumping Mining Operations Copper Forming Secondary Copper Oper (Brass and Bronze Pro) Furnace Tapping Furnace Charging Metal Casting Electrometallurgical Products	Gaseous, aerosol, particulate releases including but not limited to: From the converter, furnace, roaster vessel, material storage and handling, outdoor storage pile, service road Gaseous, aerosol, particulate releases including but not limited to: From the furnace, and service road
Ferroalloy Production Furnace Tapping Furnace Charging Material Prep Metal Casting Mining, except V Slag Dumping Iron & Steel Foundries	Gaseous, aerosol, particulate releases including but not limited to: From material storage & handling, storage pile, furnace, decarburizing vessels
Iron and Steel Pro Coke Oven Charging/ Pushing From the coke oven Furnace Tapping Furnace Charging Material Preparation Coke Quenching Slag Dumping Mining Operations Drying Crushing Sizing Weighing Feeding Furnace	sintering machine, storage & handling, storage pile, service road
Also see Combustion (Blast Fur Gray Iron Foundries Furnace Tapping Furnace Charging Converter Charging Metal Casting Cupola	rnace), Appendix C-I Gaseous, aerosol, partic releases including but not limited to: From the furnace, foundry mold & core decomposition, & service road

Some Specific Substances (Including, but not limited to)

Arsenic, Cadmium, Copper, Lead, Mercury, POM, PAHs*, Selenium, Zinc

Arsenic, Mercury, Cadmium, Copper Perchloroethylene

Cadmium, Copper, Lead, Manganese, Mercury, POM, PAHs*, Selenium, Zinc

Arsenic, Cadmium, Chromium, Copper, Manganese, Nickel

Cadmium, Chromium, Copper, Lead, Manganese, Nickel, POM, PAHs*, Zinc

Nickel

Ammonia, Arsenic, Benzene, Beryllium, Cadmium, Chlorine, Chromium, Coke oven emis, Copper, Formaldehyde, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Mercury, Naphthalene, Nickel, POM, PAHs*, Phenol, Toluene, TCE, Xylenes, Zinc

Acetaldehyde, Acrolein, Ammonia, Arsenic, Benzene, Beryllium, Cadmium, Chromium, Copper, Formaldehyde, Hydrogen sulfide, Iron, Lead, Manganese, Mercury, Naphthalene, Nickel, Phenol, POM, PAHs*, Styrene, Toluene, TCA, Xylenes, Zinc Ammonia, Formaldehyde, Zinc Cadmium, Chromium

Type(s) of Emissions/ Emitting Process Points

Metal Smelters & Foundries continued
Steel Foundries
Converter Charging
Furnace Tapping
Furnace Charging
Metal Casting
Basic Oxygen Proc

Gaseous, aerosol, partic releases including but not limited to:
From furnace, foundry mold & core decomposition, and service road
From argon oxygen decarburization vessels, coke ovens

Miscellaneous

Cold Finish Steel Shapes
Steel Pipe & Tubes
Steel Wire & Related
Products
Primary Lead Smelting
Furnace Tapping
Furnace Charging
Material Prep
Metal Casting
Slag Dumping
Mining Operations
Secondary Lead Smelt
Furnace Tapping
Furnace Charging
Metal Casting

Gaseous, aerosol, partic releases including but not limited to:
From the furnace, sintering machine, material storage and handling, outdoor storage pile, and service road

Furnace Charging Metal Casting Lead Acid Battery Pro Material Prep Metal Casting Gaseous, aerosol, partic releases including but not limited to:
From the furnace, service road, and outdoor storage pile
Gaseous, aerosol, partic releases including but not limited to:

Screening
Storage & Handling
Miscellaneous Lead Pro
Converter Charging
Material Preparation
Metal Casting

Gaseous, aerosol, partic releases including but not limited to:

Manganese Production
Furnace Charging
Furnace Tapping
Material Crusher/
Mill
Metal Casting

Slagging

Gaseous, aerosol, partic releases including but not limited to:
From the furnace, mat'l storage & handling, storage pile, slips, casthouse, sinter discharge, windbox & discharge

Synthetic Mang Pro Roasting Drying Grinding Packaging/Handling Melting

Refining Hot Metal Transfr Some Specific Substances (Including, but not limited to)

Arsenic, Beryllium, Cadmium, Chromium, Manganese, Nickel, Zinc

Ammonia, Arsenic, Cadmium, Chromium, Copper, Hydrogen chloride, Lead, Naphthalene, Nickel, Perc, Phenol, Styrene, Toluene, TCA, Kylenes, Zinc Methylene chloride, Toluene Ammonia, Perc Ammonia, Chlorine, Hydrogen chloride, Lead, PCB, Toluene, Zinc

Arsenic, Cadmium, Copper, Lead, POM, PAHs*, Mercury, Selenium

Arsenic, Lead, Manganese, POM, PAHs*, Selenium

Arsenic, Cadmium, Lead, Manganese Mercury

Arsenic, Cadmium, Lead

Manganese, POM, PAHs*

Type(s) of Emissions/ Emitting Process Points

Dry Battery Production Material Prep

Screening Storage & Handling

Metal Smelters & Foundries continued

Mercury Production Mining

> Prim. Ore Process Secondary Prod

Nickel Production Metal Casting Mining Operations Refining

Melting/Roasting Crushing

Alloys

Electrical Alloys Secondary Processing of Nickel Scrap

Radium, Uranium, & Vanadium Mining

Drying Nonferrous Metal Prod Super Alloys Permanent Magnet

Steel Foundries - see Metal Smelters, Iron & Steel, Appendix C-II Uranium Prod - see Metal Smelters, Radium, Appendix C-II

Material Prep Slag Dumping Mining Operations

Secondary Zinc Process Furnace Tapping Furnace Charging Metal Casting

Particulate substance releases including but not limited to: From the material crusher/mill and

material storage Also see Electrical & Electronic Equipment, Appendix C-II Particulate releases including but not limited to: From smelter, hoeing, retort

> Gaseous, aerosol, partic releases including but not limited to: From the calciner, furnace, material crusher/mill, roaster, material storage & handling, rotary dryers, storage pile, day bin, skip hoists

Gaseous, aerosol, partic releases including but not limited to:

Gaseous, aerosol, partic releases including but not limited to: Gaseous, aerosol, partic releases including but not limited to:

Vanadium Prod - see Metal Smelters, Radium, Appendix C-II Primary Zinc Smelting Gaseous, aerosol, partic releases including but not limited to: From the condenser, furnace, roaster, retort, material storage and handling, outdoor storage pile, and service road

Gaseous, aerosol, partic releases including but not limited to: From the furnace, condenser, retort service road, and galvanizing vessel Some Specific Substances (Including, but not limited to)

Manganese, Mercury

Mercury

Arsenic, Cadmium, Lead, Nickel, POM, PAHs*, Selenium, Zinc

Nickel

Nickel

Ammonia, Gasoline vapors, Hydrogen Sulfide, Radionuclides

Arsenic, Cadmium, Copper, Mercury, POM, PAHs*, Selenium, Zinc

Cadmium, Mercury, Nickel, Selenium, Zinc

Type(s) of Emissions/ Emitting Process Points

Military Bases

Chemical Prod - see Chemical Mfg, Military Chem Mfg, Appendix C-II Combustion Process - see Combustion, Appendix C-I Degreasing - see Solvent Use, Appendix C-I Research - see Research & Development, Appendix C-II Surface Coating - see Solvent Use and Other Processes, Appendix C-I Vehicle Refueling - see Other Processes, Appendix C-I

Millworks - see Wood Product Mfg, Appendix C-II

Mining of Non-Metals (for Metals Mining see Metal Smelters, Appendix C-II) Arsenic Mining Anthracite Mining Asbestos Clav

Coal (Bituminous) & Lignite
Limestone
Minerals, Nonmetallic

Phosphate Rock Sand & Gravel Construction Industrial

Sulfur

Monofilament Fiber Mfg
Wet Spin
Dry Spin
Filter-tow Dry Spin
Filament Yarn Dry Spin

Gaseous and particulate releases including but not limited to:
 From: polymer and solvent storage dope preparation (blending), filtration, spin cell, lubrication, drawing, finish application, and drying

Combustion Processes - see Combustion, Appendix C-I Storage - see Liquid Storage & Transfer, Appendix C-I Surface Coating - see Solvent Use and Other Processes, Appendix C-I

Motor Vehicle Production - see Transportation Equipment, Appendix C-II

Motorcycle Mfg - see Transportation Equipment, Appendix C-II

Musical Instrument Mfg
Also see - Combustion, Other Processes, and Solvent Use, Appendix C-I
Wood Product Mfg, Appendix C-II

Some Specific Substances (Including, but not limited to)

Arsenic
Arsenic, POM, PAHs*, Toluene diisocyanate
Asbestos, Silica
Arsenic, Beryllium, Lead, Toluene
diisocyanate
Arsenic, Hydrogen sulfide, Toluene
diisocyanate
Arsenic, Hydrogen sulfide, Toluene
diisocyanate
Nickel
Arsenic, Asbestos, Beryllium, Cadmium,
Chromium, Lead, Toluene diisocyanate
Radionuclides
Asbestos, Crystalline silica
Vinyl Chloride
Arsenic, Beryllium, Lead, Phenol,
Toluene diisocyanate
Arsenic, Hydrogen sulfide

Polymer constituents - Acrylonitrile, Propylene, Vinyl chloride

Solvents/precipitants - Sodium hydroxide, Toluene, Zinc chloride Flame retardants - Vinyl bromide Promoters/activators - Hydrazine Lubricants - Ammonium salts

Lead, Toluene, TCE

Type(s) of Emissions/ Emitting Process Points

National Defense

Also see Military Bases, Appendix C-II

National Security

Natural Gas Combustion - see Combustion, Appendix C-I

Needle, Pin, & Fastener Mfg

Also see Metal Prod Fabrication, Appendix C-II

Newspaper Publishing - see Printing & Publishing, Appendix C-II

Nickel Plating - see Metal Plating, Appendix C-II

Office Machine Mfg - see Machinery Mfg, Appendix C-II

Office Supplies Mfg Carbon Paper & Inked Ribbons Lead Pencils & Art Goods Marking Devices Pens & Mech Pencils

Ink/Dye Mfg - see Chemical Mfg, Appendix C-II

Oil Combustion - see Combustion, Appendix C-I

Oil and Gas Extraction

Drilling Wells Exploration

Extraction

Natural Gas & Crude Petroleum Nat'l Gas Liquids Services

Field Services
Gas Stripping
Fugitive Losses

Gaseous and aerosol releases From field separator

Some Specific Substances (Including, but not limited to)

Carbon tetrachloride, CFC 113, Chromium, Dioxin, Hydrazine, Mercury, Methylene chloride, Perc, Phenol, PCBs, TCA, Xylenes

Ammonia, Benzene, Beryllium, Cadmium, Chlorinated phenols, Chromium, ETO, Formaldehyde, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Methylene chloride, Nickel, Perc, Phenol, POM, PAHs*, Radionuclides, TCA, TCE, Xylenes

Formaldehyde, Hydrogen chloride, Lead, Toluene, TCE, Zinc

Toluene Copper, Formaldehyde, Toluene Lead, Toluene, TCE, Zinc Chlorine, Methylene chloride, Perc, Toluene, TCE

Benzene, Phenols, POM, PAHs*, Sulfur compounds, Toluene, Xylenes Hydrogen sulfide Benzene, Carbon tetrachloride, Chlorobenzene, 1,4-Dichlorobenzene, EDC, Hydrogen sulfide, Toluene, TCA, Xylenes

Ammonia, Formaldehyde, Gasoline vapors, Hydrogen sulfide Ammonia, Hydrogen sulfide Hydrogen sulfide, Gasoline vapors

EDC

Type(s) of Emissions/ Emitting Process Points

Oil Production Fugitive Losses

Gaseous and aerosol releases from: sumps, wells, well heads, well cellars, pumps, fittings, oil pits, compressors, oil/ water separators,

Tertiary Oil Production Gaseous and aerosol releases from: steam drive wells, cyclic wells, pseudo cyclic wells Gaseous and aerosol releases

Heavy Oil Test Stations

From test stations Combustion Processes - see Combustion, Appendix C-I Oil Storage - see Liquid Storage and Transfer, Appendix C-I Other Processes - see Other Processes & Fugitives, Appendix C-I Solvent Use - see Solvent Use, Appendix C-I Storage & Handling - see Liquid Storage & Transfer, Appendix C-I

Organic Chemical Mfg - see Chemical Mfg, Appendix C-II

Paint & Allied Products Mfg - see Chemical Mfg, Appendix C-II

Paper & Paper Prod. Mfg/Treating - see Wood, Appendix C-II

Pens & Pencils - see Office Supplies, Appendix C-II

Petroleum Bulk Stations & Terminals

Also see - Bulk Plants & Terminals, Appendix C-II

Petroleum & Coal Products Miscellaneous Asphalt Felts & Ctgs

Lubricating Oils & Greases

Paving & Roofing Mat'ls Paving Mixtures & Blocks

Petroleum Refineries (1)Most Refinery Operations

Gaseous, aerosol, partic releases including but not limited to: From: boiler, cat cracker, flare, incinerator, process heater

Some Specific Substances (Including, but not limited to)

Benzene, Benzyl chloride, Carbon Tetrachloride Chlorine, EDB, EDC, Formaldehyde, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Methyl methacrylate, Styrene, Toluene, Xylenes

Chromium, Gasoline vapors, Naphthalene Asbestos, Carbon tetrachloride, Chromium, Formaldehyde, POM, PAHs* Asbestos, Benzene, Epichlorohydrin, Formaldehyde, Hydrogen sulfide, Toluene, TCA, TCE, Xylenes

Ammonia, Asbestos, Benzene, BaP & other PAHs*, Chloroform, Chromium, Formaldehyde, Mercury, Methyl isocyanate, POM, Toluene, TCA

Acetaldehyde, Ammonia, Arsenic, Benzene, BaP & other PAHs*, Beryllium, Cadmium, Carbon disulfide, Chlorine, Chromium, Cresol, Dimethyl sulfate, EDB, EDC, Formaldehyde, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Lead, Maleic anhydride, Mercury, Naphthalene, Nickel, Phenol, POM, Toluene, Xylenes, Zinc, Zinc oxide

Type(s) of Emissions/ Emitting Process Points

Petroleum & Coal continued
(2)Crude Separation
Gas Product'n

In addition to item (1) absorber, distillation/fractionation

(3)Light Hydrocarbon Processing

In addition to item (1): catalyst regeneration

(4)Middle and Heavy
Distillate Process

In addition to items (1) and (2): evaporation, stripper

(5)Residual Hydrocarbon Processing

In addition to items (1) and (2):
 visbreaker furnace, process vent,

Also see Combustion, Liquid Storage & Transfer, and Other Processes, Appendix C-I Chemical Mfg, and Oil & Gas Extraction, Appendix C-II

Pharmaceutical Industries - see Chemical Mfg, Drugs, Appendix C-II

Photocopying & Blueprinting

Photographic Chemicals Mfg - see Chemical Mfg, Appendix C-II

Photographic Studios

Photofinishing Labs

Pipelines - see Other Processes and Liquid Storage & Transfer, Appendix C-I

Plastic & Synthetics Mfg - see Chemical Manufacturing, Appendix C-II

Plastic Products Mfg Plastics Forming

Printing & Publishing Miscellaneous Blankbooks & Bookbinding Blankbooks & Looseleaf Binders Bookbinding etc

Books

Printing Publishing Some Specific Substances (Including, but not limited to)

In addition to item (1)-Ammonia, Chlorides,
 Cresols, EDC, Maleic anhydride, Michler's
 Ketone, Phenols, POM, PAHs*, Sulfur Cmpds, Zinc

In addition to item (1)-Nickel Carbonyl

In addition to item (1)-Acetaldehyde, Ammonia, Copper, Cresols, Formaldehyde, Maleic anhydride, Michler's ketone, Nickel, Phenols, POM, PAHs*, Sulfur Compounds, Xylenes, Zinc, Any other listed Aromatic amine

In addition to item (1)-Acetaldehyde, Ammonia, Chromates, Cresol, Formaldehyde, Lead, stripper Maleic anhydride, Michler's Ketone, Lead, Nickel, Nickel carbonyl, Phenols, POM, PAHs*, Sulfur Cmpds, Zinc, Any other listed Aromatic amine

Ammonia

Ammonia

Methylene chloride, TCA

TCA

Toluene

Ammonia, Toluene, TCA, TCE Toluene

Lead, TCA Arsenic, Lead

Type(s) of Emissions/ Emitting Process Points

Printing & Publishing continued Newspapers Printing (Commercial) Engraving & Plate Gravure

Letterpress

Lithographic
Printing Trade Svcs
Typesetting
Electrotyping &
Stereotyping
Publishing (Misc)
Combustion Processes - see Combustion, Appendix C-I
Ink Mfg - see Chemical Mfg, Appendix C-II
Printing - see Solvent Use, Appendix C-I
Surface Coating - see Solvent Use, Appendix C-I

Process Gas Combustion - see Combustion, Appendix C-I

Publicly Owned Treatment Works (POTWs)

Miscellaneous

Gaseous products
including but not limited to:
From raw sewage offgases

Combustion

From exhaust gases of digester gas burning engines modified to lower NOx emissions

Sludge Composting

From sawdust used as bulking agent (sawdust from lumber obtained at structural demolition projects)

Sludge Dewatering
(using an aminomethylated polyacrylamide
having a dimethylamine
group in the polymer)
Sludge Treatment

Aeration Tanks - see Liquid Storage & Transfer, Appendix C-I Chlorinator Discharge Digesters
Headworks
Sludge Incinerators - see Combustion, Appendix C-I
Water Treatment - see Other Processes, Appendix C-I

Some Specific Substances (Including, but not limited to)

TCE
Toluene, TCA
Benzene
Ammonia, Benzene, Cadmium, Formaldehyde,
Gasoline vapors, Methylene chloride,
Nickel, Perc, Toluene, TCA, TCE, Xylenes
Ammonia, Benzene, Chromium, Methylene
chloride, Naphthalene, Perc, Toluene, TCE
Ammonia, Benzene, Toluene, TCE

Ammonia

Lead Toluene

Acrylonitrile, Benzene, Carbon tetrachloride, CFC-113, Chlorine, Chlorobenzene, Chloroform, EDC, Fluorocarbons, Hydrogen sulfide, Methylene chloride, Perc, Toluene, TCA, TCE, Vinyl chloride, Vinylidene chloride, Xylenes

Carbon tetrachloride, Chlorobenzene, p-Dichlorobenzene, EDC Acrolein, 1,3-Butadiene

Ammonia, Dimethylamine Asbestos

Dimethylamine

Chloroform

Type(s) of Emissions/ Emitting Process Points

Pulp Mills - see Wood Product Mfg, Appendix C-II

Ouarries

Particulate-phase substances including but not limited to:

Railroad Equip Mfg - see Transportation Equip, Appendix C-II

Refractory Production

Research & Devel. Labs

Commercial Testing Labs

Chemical Mfg - see Chemical Mfg, Appendix C-II Combustion Processes - see Combustion, Appendix C-I Other Processes - see Other Processes, Appendix C-I Solvents - see Solvent Use, Appendix C-I Storage and Handling - see Liquid Storage & Transfer, Appendix C-I

Roadway Surfacing

Rubber Mfg - see Chemical Mfg, Appendix C-II

Rubber & Misc Plastics Prod Fabricated Rubber Prod

Plastics Prod, Misc

Reclaimed Rubber Rubber & Plastic Footwear Rubber & Plastic Hose/Belting Tires & Inner Tubes

Rubber Mfg - see Chemical Mfg, Appendix C-II Surface Coating - see Solvent Use, Appendix C-I Some Specific Substances (Including, but not limited to)

Asbestos, Arsenic, Silica

Chromium

Ammonia, Cadmium, Chloride, Chromium, Copper, Formaldehyde, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Mercury, Methylene chloride, Nickel, Perc, Phosgene, Phthalic anhydride, Styrene, Toluene, TCA, TCE, Zinc, Zinc oxide
Epichlorohydrin, Hydrogen sulfide

Asbestos, Benzene

Ammonia, Benzene, Chlorine, ETO, Formaldehyde, Hydrogen chloride, Lead, Methylene chloride, Naphthalene, Perc, Styrene, Toluene, Toluene diisocyanate, TCA, Vinyl chloride, Zinc, Zinc oxide Acetaldehyde, Acrylonitrile, Ammonia, Benzene, Benzyl chloride, Beryllium, Chlorine, EDC, ETO, Formaldehyde, Freon 113, Gasoline vapors, Hydrogen chloride, Hydrogen sulfide, Lead, Mercury, Methyl methacrylate, Methylene chloride, Naphthalene, Phenol, Phthalic anhydride, Styrene, Toluene, Toluene diisocyanate, TCA, TCE, Vinyl chloride, Zinc oxide Benzene, Cadmium, Lead, Naphthalene, Toluene Naphthalene, Toluene, TCA Perc, Toluene Ammonia, Benzene, Methylene chloride, Styrene, Toluene, TCA, Zinc oxide

Type(s) of Emissions/ Emitting Process Points Some Specific Substances (Including, but not limited to)

Rubber Cement Application/Manufacture

Application - see Solvent Use, Appendix C-I

Manufacture - see Solvent Use, Appendix C-I and Chemical Mfg, Appendix C-II

Saw Mills - see Wood Product Mfg, Appendix C-II

Semiconductor Mfg - see Electronic Equipment Mfg, Integrated Circuits, Appendix C-II

Sewage Plants - see Combustion (Incineration), Appendix C-I

Shingle & Siding Mfg

Also see Plastics, Appendix C-II

Sign & Advert. Display Mfg

Smelters - see Metal Smelters, Appendix C-II

Solvent Recycling

Also see - Solvent Use, Appendix C-I

Space Research & Technology

Combustion Processes - see Combustion, Appendix C-I

Degreasing - see Solvent Use, Appendix C-I

Research - see Research & Development, Appendix C-II

Surface Coating - see Solvent Use and Other Processes, Appendix C-I

Vehicle Refueling - see Other Processes, Appendix C-I

Sporting & Athletic Goods Mfg

Also see Combustion, Solvent Use, and Surface Coating, Appendix C-I

Chemical Mfg, Metal Product Mfg, Rubber Product Mfg, and Textiles Mfg, Appendix C-II

Stone Products Mfg - see Clay, Glass & Stone Products, Appendix C-II

Surface Coating Application/Manufacture

Application - see Solvent Use and Surface Coating, Appendix C-I

Manufacture - see Chemical Mfg, Appendix C-II

Surgical & Med Supp Mfg

Combustion Processes - see Combustion, Appendix C-I

Degreasing - see Solvent Use, Appendix C-I

Instruments - see Instrument Mfg, Appendix C-II

Other Processes - see Other Processes, Appendix C-I

Pharmaceuticals Mfg - see Chemical Mfg, Appendix C-II

Sterilization - see Sterilizers, Appendix C-I

Surface Coating - see Solvent Use, Appendix C-1

TSDFs - see Transfer, Storage, & Disposal Facilities, Appendix C-II

Asbestos

Ammonia, Beryllium, Hydrogen chloride, Naphthalene, Perc, Toluene, TCA, TCE, Zinc

Benzene, Chlorinated organics

Methylene chloride, TCA

Type(s) of Emissions/ Emitting Process Points

Textile Mill Product'n Mfg. Miscellaneous

Apparel/Other Textile Prod

Fur Goods Apparel Belts

House Furnishings Auto/Apparel Trimmings

Floor Covering Mills
Miscellaneous
Woven Carpets & Rugs
Tufted Carpets & Rugs
Knitting Mills
Hosiery
Knit Outerwear Mills
Narrow Fabric Mills
Nonwoven Industry

Finish Plants Cotton

Miscellaneous

Textile Finishing

Synthetic

Weaving Mills Cotton

Synthetics

Wool
Woven Fabric Finishing
Yarn & Thread Mills
Yarn Mills,not wool
Throwing & Winding
Wool Yarn Mills
Misc Textile Goods
Coated Fabrics, not
rubberized

Cordage & Twine

Some Specific Substances (Including, but not limited to)

Asbestos, Benzene, Benzidine, Bis(chloromethyl) ether, 1,4-Dichlorobenzene, Dichloroethane, Dioxane, Ethyleneimine, Formaldehyde, Hydrazinc, Methyl Bromide, Perc, Phenol, TCE

Ammonia, Arsenic, Chlorine, EDC, Toluene, TCA Ammonia, Perc Ammonia, Cadmium, Copper, Toluene, Zinc Toluene Napthalene, Toluene Ammonia, Arsenic, Benzene, Toluene, Vinyl chloride

Arsenic
Arsenic
Benzene, Formaldehyde
Benzene, Benzidine
Acrylonitrile, Benzene
Ammonia, Arsenic, Benzene, Perc
Benzene, 1,4-Dioxane, Mineral fibers
Bis(chloromethyl) ether

Acrylonitrile, Benzene, Benzidene, 1,3-Butadiene, Formaldehyde, Hydrazine, Perc, Toluene, Vinyl chloride, Vinylidene chloride, Xylenes

Acrylonitrile, Benzene, Chromium, 1,4-Dichlorobenzene, Toluene Benzene, Copper, 1,4-Dioxane, Formaldehyde, Hydrazine, Perc, Xylenes

Acrylonitrile, Benzene, 1,4-Dioxane, EDC, Toluene
Acrylonitrile, Benzene, Chloroform, 1,4-Dioxane, EDC, Formaldehyde, Mineral fibers, Perc, Styrene, Toluene diisocyanate
Benzene, 1,4-Dioxane, Formaldehyde, Perc 1,4-Dichlorobenzene

Toluene diisocyanate Ammonia, Lead, Toluene diisocyanate Arsenic

Arsenic, Benzene, Cresol, Formaldehyde, Hydrogen chloride, Lead, Perc, Styrene, Toluene, Xylenes TCA Type(s) of Emissions/ Emitting Process Points

Textile Mill Product'n Mfg (Misc) continued
Felt goods
Paddings & Upholstery
Filling
Processes Textile
Waste
Tire Cord & Fabric

Cleaning - see Degreasing, Appendix C-I and Dry Cleaning, Appendix C-II Combustion Processes - see Combustion, Appendix C-I Dyeing - see Chemical Mfg and Dyeing of Textiles, Appendix C-II Surface Coating/Solvent Use - see Solvent Use, Appendix C-I

Tobacco Mfg Cigarette Mfg

Tobacco Stemming & Redrying

Toy & Sporting Good Mfg
Dolls
Games, Toys, & Children's Vehicles
Sport & Athletic Goods
Combustion Processes - see Combustion, Appendix C-I
Degreasing/Surface Coating - see Solvent Use and Other Processes, Appendix C-I
Labeling/Packaging - see Printing and Wood (Paper) Products, Appendix C-II
Also see - Metal, Rubber, and Wood Products, Appendix C-II

Train Mfg/Rpf - see Transportation Equipment, Appendix C-II

Transfer, Storage, & Disposal Facil's (TSDFs)
Combustion Processes - see Combustion, Appendix C-I
Other Processes - see Other Processes, Appendix C-I
Solvent Recycling - see Solvent Use, Appendix C-I
Storage - see Liquid Storage & Transfer, Appendix C-I

Transportation Equip Mfg/Rpr

Auto Repair/Auto Body Repair Gen'l Auto Repair

> Tire Retreading & Rpr Paint Shops

Top & Body Rpr Shops Motor Vehicles & Car Bodies Some Specific Substances (Including, but not limited to)

Arsenic, TCA

Benzene

Formaldehyde Ammonia, Asbestos, Benzene, Formaldehyde, Perc

Benzene, Chloroform, Formaldehyde, Methylene chloride, Perc, Toluene

Benzene

Acrylonitrile, Toluene

Styrene, Toluene Perc, Styrene, Toluene

Hydrogen chloride, Methylene chloride, Perc, Toluene, TCE

Ammonia, Asbestos, Formaldehyde, Toluene, TCA Toluene Benzene, Naphthalene, Toluene, Xylenes Zinc Oxide Naphthalene, Toluene Ammonia, Cadmium, Chromium, Formaldehyde, Hydrogen chloride, Lead, Methylene chloride, Phenol, Toluene

Type(s) of Emissions/ Emitting Process Points

Transportation Equip, Auto Mfg/Rpr, continued Motor Vehicle Parts & Accessories

Truck, Camper, Trailer, & Bus Bodies

Auto Parts Mfg
Brake lining Mfg
Aircraft & Parts

Guided Missiles, Space Vehicles, & Parts Guid Mis'ls Spc Vehs

Spc Propulsion Units
 & Parts
Spc Veh Equipment

Motorcycles, Bicycles & Parts
Railroad Equipment

Ship & Boat Bld & Rpr

Combustion Processes - see Combustion, Appendix C-I
Degreasing - see Solvent Use, Appendix C-I
Metal Forming - see Machining and Metal Smelters, Appendix C-II
Military Transport - see Military, Appendix C-II
Paint Preparation - see Chemical Mfg, Appendix C-II
Research - see Research & Development, Appendix C-II
Space Transport - see Space Research & Technology, Appendix C-II
Storage & Handling - see Liquid Storage & Transfer, Appendix C-I
Surface Coating/Touch-up - see Solvent Use and Other Processes, Appendix C-I
Upholstery Mfg - see Textile Mill Prod Mfg, Appendix C-II

Transportation Equip Sales
Boat Dealers
Used Car Dealers

Some Specific Substances (Including, but not limited to)

Ammonia, Asbestos, Benzene, Cadmium, Chlorine, Chloroform, Chromium, Copper, Formaldehyde, Hydrogen chloride, Hydrogen sulfide, Lead, Manganese, Methylene chloride, Naphthalene, Perc, Toluene, Toluene diisocyanate, TCA, TCE, Zinc, Zinc oxide

Chromium, Methylene chloride, Nickel, Styrene, Toluene

Asbestos

Ammonia, Chromium, Hydrogen chloride, Hydrogen fluoride, Hydrogen sulfide, Lead, Methylene chloride, Nickel, Perc, Styrene, Toluene, TCA, TCE, Xylenes, Zinc, Zinc oxide

Formaldehyde, Hydrazine, Perc, Toluene, TCE, Xylenes

Hydrazine, TCE Ammonia, Hydrazine, Hydrogen chloride, Lead, Methylene chloride, Toluene

Toluene

Ammonia, Chromium, Hydrogen chloride, Methylene chloride, Nickel, Toluene, Toluene diisocyanate, TCA Asbestos, Hydrazine, Methylene chloride, Phenol, PCBs, Styrene, TCE

Toluene Toluene

Type(s) of Emissions/ Emitting Process Points

Transportation Ports/Stations Airports & Flying Fields Inspection & Weighing Marine Cargo Handling

Combustion Processes - see Combustion, Appendix C-I Degreasing/Paint Stripping - see Solvent Use, Appendix C-I Electroplating - see Metal Plating, Appendix C-II Refueling - see Other Processes, Appendix C-I

Truck Mfg - see Transportation Equipment, Appendix C-II

Universities - see Colleges, Appendix C-II

Varnish Mfg - see Chemical Mfg, Appendix C-II

Water Treatment - see Other Processes, Appendix C-I

Wood Combustion - see Combustion, Appendix C-I

Wood Preservation
Cellon Process
Chromated Copper
Arsenate Process
Dricon Process
Diluent/Creosote
Process
Oil/Penta Process

Gaseous and aerosol releases from: wood preserving agents

vapor drying agents preserving carriers fire retardants

Combustion Processes - see Combustion, Appendix C-I

Wood Chemicals Mfg - see Chemical Mfg, Appendix C-II

Wood Products Mfg.
Fiberboard Mfg.
Lumber
Millwork, Plywood, &
Structural Members
Millwork

Miscellaneous

Wood Kitchen Cabinets

Hardwood Veneer/Plywood

Some Specific Substances (Including, but not limited to)

Benzene, Dioxins, POM, PAHs*, Radionuclides, Toluene EDC, Lead, Methylene chloride, Perc, Toluene, Toluene diisocyanate, TCA, TCE, Xylenes

Arsenic, Benzene, Chloroform, Chromium, Copper, Cresols, Dibenzofuran, Dioxins, Hydrogen chloride, Phenol, Naphthalene, Toluene, Zinc, Zinc Oxide

various solvents various solvents Formaldehyde, Zinc chloride

Cresols, Formaldehyde, Dioxins, TCE Chloroform Cresols, Formaldehyde, Dioxins, TCE, Toluene

Asbestos, Carbon tetrachloride, Chlorophenols, Formaldehyde, Methylene chloride, Toluene, Xylenes Methylene chloride, Naphthalene, Styrene, Toluene, TCA, Xylenes Formaldehyde, Perc

Industry/	
Emitting	Process

Type(s) of Emissions/ Emitting Process Points

Wood Product Mfg continued Paper & Allied Prod Mfg

Gaseous/aerosol/particulate releases including but not limited to:
From: Sizing agents
Wet & dry-strength agents
Adhesives
Dyes & pigments

Binders
Pigment fillers/coatings
Humectants
Coatings
Oil-resistant additives
Machine operating aids
Retention aids
Biocides & slime cont'l
Deinking agents
Bleaching chemicals

From chemicals imported in waste paper: ink pigments, coating agents, binders, adhesives -

Bldg Paper & Board Mills Deink Fine & Tissue Paper, Secondary Fiber Mills Paper Mills Misc

Paperboard Containers & Boxes Mfg
Corrug. & Solid Fiber Box Folding Box Sanitary Food Containers Fiber Cans, Drums, etc Set-Up Box
Paperboard Mills
Converted Paper Prod Die-Cut Paper & Board Paper Bags

Pressed & Molded Pulp Goods Miscellaneous Some Specific Substances (Including, but not limited to)

Acrylamide, Styrene
Epichlorohydrin, Formaldehyde
Acrylamide, Ammonia
Benzidine, Direct Black 38, Direct Blue 6
Lead, o-Tolidine
Styrene
Asbestos, Styrene, Zinc, Zinc Oxide
Formaldehyde
Ammonia, Sodium hydroxide
Fluorochemical chrome complex

Asbestos, Epichlorohydrin
Acrolein, TCA, Trichlorophenol
Sodium hydroxide
Ammonia, Chlorine, Chloroform, Chromic
sulfate, Methanol, Sodium hydroxide, Zinc

Chloroform, Phenol, Toluene

Ammonia, Asbestos

Chloroform Arsenic, Cadmium, Chlorine, Chloroform, Hydrogen sulfide, Toluene, TCE

Ammonia, TCE Formaldehyde

Acetaldehyde, Ammonia, Toluene

Ammonia, Toluene Toluene Cadmium, Chloroform, Formaldehyde, Toluene

Toluene, TCE Acetaldehyde, Ammonia, Formaldehyde, Hydrogen chloride, Methylene chloride, Naphthalene, Perc, Toluene, TCA

Zinc Ammonia, Formaldehyde, Toluene

Type(s) of Emissions/ Emitting Process Points

Wood Prod Mfg continued Pulp Mill Mfg Groundwood/Mechanical Pulp Mfg Chemical Pulp Mfg Dissolving Pulp Kraft or Sulfite Sulfite Papergrade Pulp Deink Fine & Tissue Paper Pressed & Molded Pulp Goods Miscellaneous Also see - Paperboard, Coarse Paper, Tissue Paper, Appendix C-II Plywood Mfg Presswood & Laminated Wood Products Mfg

Sawmills & Planing Mills

Hardwood Dimension
& Flooring
Softwood Veneer Mfg
Wood Containers
Wood Furniture Mfg
Wood Finishing

Combustion Processes - see Combustion, Appendix C-I Surface Coating - see Solvent Use and Other Processes, Appendix C-I

Wool Fabric Mills - see Textile Mfg

All Other Industries

Gaseous releases from combustion, storage, handling, process vessels, etc

Particulate and aerosol releases from combustion, storage, handling, process vessels, etc

Process loss and fugitive releases anywhere along the process train

Some Specific Substances (Including, but not limited to)

Ammonia, Calcium, Carbon, Caustic soda, Sodium sulfate, Sulfur dioxide

Chloroform

Chloroform

Chloroform

Zinc Chlorine, Chloroform, Hydrogen sulfide

Cresols, Dioxins
Phenol-formaldehyde resins Formaldehyde, Phenol
Melamine-formaldehyde resins - Formaldehyde
Dispersion agent (during glue formulation)
- Sodium hydroxide
Formaldehyde scavengers - Ammonia

Acetaldehyde, Formaldehyde, Lead, POM, PAHs*, Toluene

Toluene Cresols, Dioxins Toluene

Chromium, Methylene chloride, TCA

Feedstocks that are on list of substances or may contain listed substances as substances.

Check all materials manufactured for components that on listed substances